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# THESIS

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ABSTRACT

Eighty-six oceanographic stations were occupied in the waters between Monterey Bay and San Francisco Bay during the period 7-14 November 1969. Values of beam transmittance, oxygen content, particulate count, and temperature were obtained from the surface to 100 meters. These parameters were analyzed and compared by means of depth profiles, horizontal contours and vertical contours.

The average sea surface temperature during this period was 14.44° C. The northern part of Monterey Bay had the lowest values of beam transmittance and highest values of particulate count. The California Current appears to be flowing southward down the coast at depths above 60 meters and entering Monterey Bay where it sinks to a depth of at least 61 meters. Indications of downwelling are present off the coast between Pt. Ano Nuevo and Santa Cruz, and this is attributed to the northward flowing Davidson Current impinging on the shore and sinking. A layer of maximum particulate count was often found to exist within the thermocline. A fairly good correlation seems to exist between beam transmittance and particulate count. No simple relationship between beam transmittance and oxygen content was apparent. Approximately 74 percent of all particulates observed by means of a Coulter Counter having a 100 micron orifice were less than 6.2 microns in diameter.

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# I. INTRODUCTION

## A. PURPOSE OF INVESTIGATION

The two primary purposes of this investigation were:

1. To measure values of beam transmittance in the relatively data - scarce coastal waters between Monterey Bay and San Francisco Bay and to compare these with measured values of salinity, oxygen, temperature and particulate count.

2. To compare the results found during this cruise with the results determined during the cruise in May 1969 and determine the changes both seasonally and with different oceanic climates.

## B. DEFINITION OF TERMS

### 1. Beam Transmittance and Beam Attenuation

Beam attenuation may be defined as the ratio of the radiant flux lost from a beam by means of absorption and scattering. Beam transmittance may be defined as the ratio of the transmitted radiant flux to the incident radiant flux [11,p7].

Beam Transmittance + Beam Attenuation = 1.

### 2. Particulate Count

Particulate count is the total count of all particulate matter for any given water mass as determined by a Coulter Counter having a 100 micron orifice.

### 3. Turbid Water

The term "turbid" water is used loosely in this investigation to mean water that contains relatively low values of beam transmittance and high values of particulate count.

C. MARINE CLIMATE

Skogsburg [19] first described the three-phase annual cycle of the marine climate in the superficial water layers of the Monterey Bay Area. Bolin [5] has named these phases. The Upwelling Period lasts from the latter part of January or early February to September. During this period a temperature of $10^{o}$ or $11^{o}$C is normal at the surface, and no clearly developed isotherm is present. This is followed in September, October, and early November by the Oceanic Period, which is characterized by surface temperatures averaging more than $13^{o}$C, the warmest of the year, and by a sharp thermocline at a depth of only a few meters. November normally marks the beginning of the Davidson Current Period. During this period the surface waters are slightly cooler and the thermocline weakens markedly as it is depressed to depths between 50 and 100 meters.

D. BACKGROUND

Until recently, one of the most overlooked oceanic parameters in the routine sampling at an oceanographic station has been light attenuation or beam transmittance. As pointed out by Jerlov [11,p155], optical data can be used in various ways to gain information about oceanographic conditions and, in particular, dynamic conditions. Scattering and beam transmittance measurements supply substantial information about two constituents of sea water, viz. particles and yellow substance [11,p155].

Light attenuation in sea water is caused by both absorption and scattering. This is different from the atmosphere, which is primarily a scattering medium [11,p1].

Scattering in sea water is a combination of the scattering produced by the water itself and that produced by suspended particles with particle size being the major parameter [11,p15]. The scattering by pure water may be considered a problem of molecular scattering. This scattering shows relatively small variations and is affected only by changes in temperature and pressure and may be considered minute [11,p24].

The transmittance of a beam of artificial light is an inherent optical property of sea water.

In the open ocean the clearest water is usually found in regions of converging surface currents and sinking water where the nutrient content is low. Areas of turbid water are usually associated with diverging surface currents accompanied by upwelling of the nutrient fertile deep water.

Several studies have been made of the waters between Monterey Bay and San Francisco Bay in the last several years. Two studies, those of Yeske and Waer [22] and of Bassett and Furminger [3], dealt only with the Monterey Bay area. Two others, the Bay-Delta study [7] and that of Labyak [14], were concerned with the waters from Monterey Bay to San Francisco Bay, with Labyak's being the most extensive study to date dealing with the optical properties of these waters. Labyak took data at 79 oceanographic stations in the waters between Monterey Bay and San Francisco Bay during the month of May 1968, i.e. during the Upwelling Period. The present study is basically an extension of Labyak's in that the same area was looked at with respect to basically the same parameters, but during the Oceanic Period.

E. PREVIOUS INVESTIGATIONS

Ball and LaFond [1,p24] found that there is a tendency for the turbidity to appear in patches and that internal waves were responsible to a large extent for the patchy pattern that occurs near the thermocline. They also point out that the organisms that make the water turbid commonly have a particular density and, seeking a level at which their buoyancy becomes neutral, they may float on the density boundary of the thermocline.

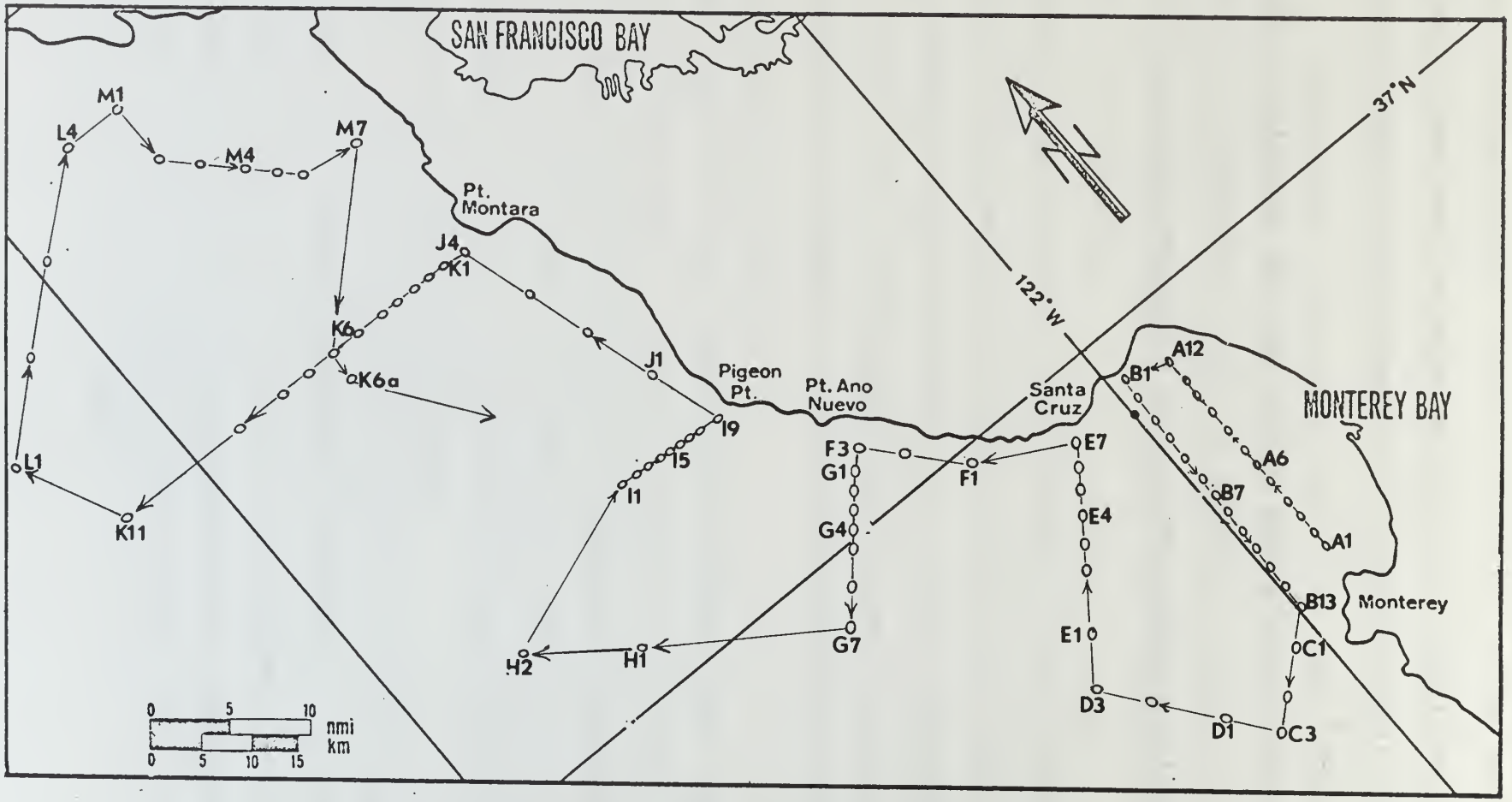
Barham, Wilton and Sullivan [2,p26] observed a layer of maximum turbidity in the thermocline and were able to observe this layer move upward towards the surface during the night. In their investigation they were able to find a definite correlation between the total count of microorganisms and temperature and no correlation between inanimate material and thermal structure.

Beer [4,p51-53], in his study of Redondo Submarine Canyon, concluded that internal waves, causing the suspension of sedimentary material, are probably the most important mechanism operating over the area of the contential shelf. He observed that surface waters contain coarser sediment than waters at depth and that the mean diameters of surface suspended sediment decrease seaward.

Labyak [14,p58] concluded that the majority of particulate maxima were found to be associated with temperature gradients of the order of $0.1^{o}C/m$ except in near shore areas and in upwelling water. In his samples taken at 79 stations off the California coast, approximately 90% of particles observed by means of a Coulter Counter having a 100 $\mu$ orifice were less than 12 $\mu$ in diameter.

Yeske and Waer [22] in their study of Monterey Bay found that approximately 68% of the particles affecting beam transmittance have Coulter sizes less than 7.6 $\mu$ in diameter, while approximately 96% were less than 8.5 $\mu$.

Joseph [12,p66] points out that where the thermocline is scattered due to the sea, the turbidity may also be "decomposed", i.e. when the thermocline disappears the layer of turbid water within it also breaks up.




Stations Occupied During 7-14 November Cruise

Figure 1

## II. OBSERVATIONAL PROCEDURE

### A. CRUISE PROCEDURE

During the period 7-14 November 1969 eighty six oceanographic stations were occupied in the coastal water between Monterey Bay and San Francisco Bay. The locations of these stations are shown in figure 1. The exact position, time, and weather conditions of each station are listed in Table 1. These stations were chosen to cover best the coastal waters in the given area in the amount of time available and approximately to cover the same region studied by Labyak in May 1969. The USNS BARTLETT (T-Agor-13) was utilized as the oceanographic research vessel. The cruise originated in Monterey Bay with station A-1 and then proceeded northward, skipping stations K-6a and K-7 because of Navy clearance problems, and ending at station M-7. Stations K-6a and K-7 were occupied on the southward journey back to Monterey Bay. Two teams were used to collect the data continuously on a 24 hour a day basis. The station farthest seaward was L-1, which was approximately 37 nmi from the coast. The stations nearest the coast were approximately 1 nmi from shore. Radar, loran and visual bearings were used to determine the ship's position.

### B. EQUIPMENT DESCRIPTION

#### 1. Beam Transmissometer

A Marine Advisors Model C-2 beam transmissometer (alpha-meter) was utilized for this cruise. This is an instrument similar to that described by Yeske and Waer [22,p15] and used by Labyak [14]. For the safety of the instrument, it was never lowered closer than 15 meters to the bottom.

2. Coulter Counter

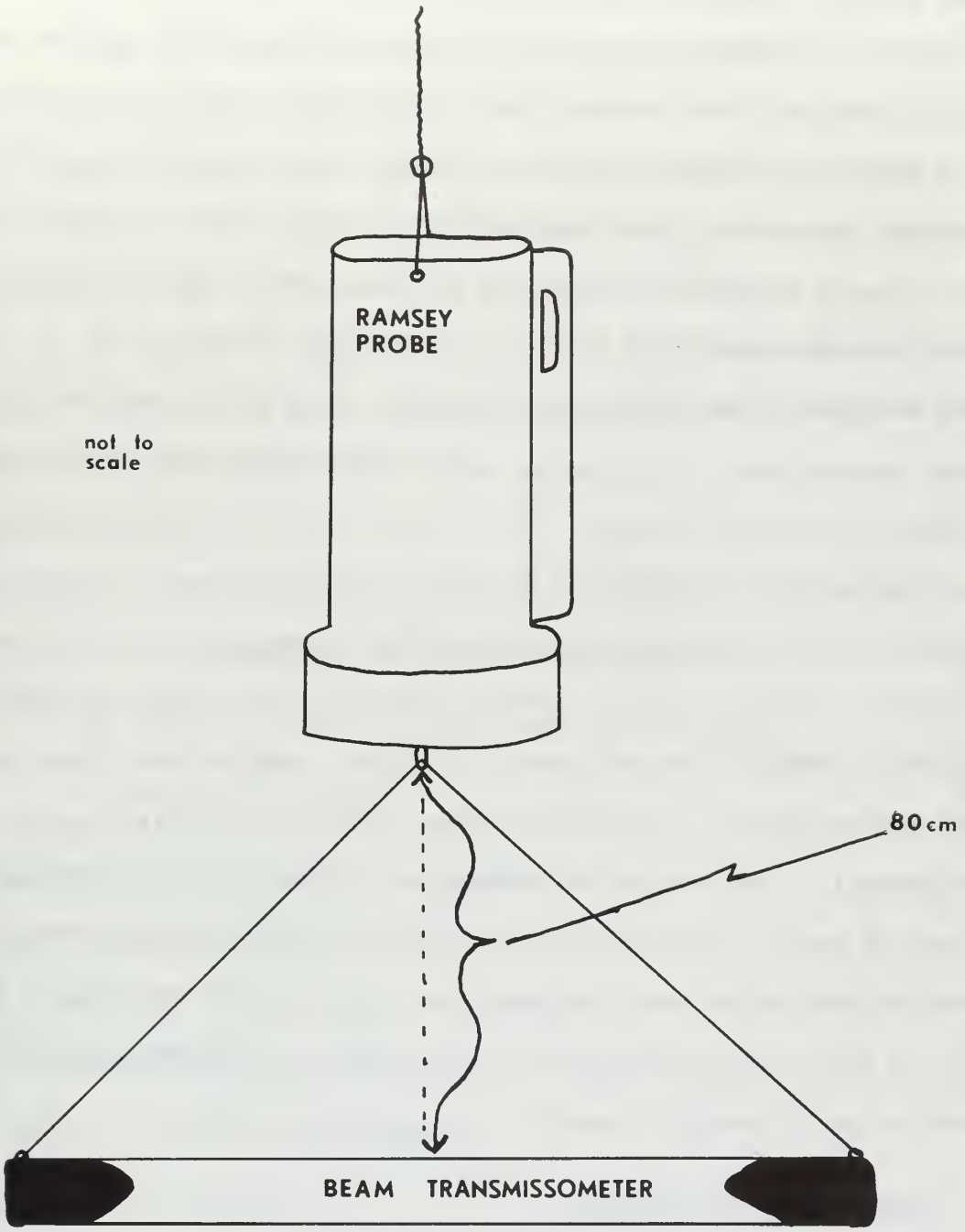
A Model A Coulter Counter located at Hopkins Marine Station, Pacific Grove, California, was used for this study. The Coulter Counter used is the same one described by Yeske and Waer [22,p17]. It was found, however, that even with the wire mesh screen described by Labyak [14,p31] surrounding the equipment, there was still some outside electrical interference present. A 0.05 microfarad capacitor was placed across the plug to the Coulter Counter. This eliminated all observable remaining outside interference. A gain setting of four was used.

3. Sound Velocity-Temperature-Depth Probe

A Ramsay Engineering Company MK-1 Deep Sea Sound Velocity/ Temperature/Depth (SV/T/D) probe was utilized at every station during the cruise. This is similar to the instrument used and described by Labyak [14,p26]. It was operated and maintained by the NAVOCEANO detachment aboard the research vessel.

C. DATA COLLECTION PROCEDURE

At least two casts were made at each station. For the first cast, the SV/T/D probe and beam transmissometer were lowered together. The beam transmissometer was located 80 cm below the SV/T/D probe. A sketch of this arrangement is shown in figure 2. The values of transmittance listed in Table 1 and plotted in figures 41 through 83 are actually for depths 80 cm lower than indicated. During the lowering of the first cast, readings of sound velocity, temperature, depth and beam transmittance were recorded at selected depths down to a maximum of 100 m. These depths were chosen to provide the highest data density in the areas where the apparent gradients in beam transmittance were




Arrangement of Ramsay Probe and Beam Transmissometer

Figure 2

the largest. These observed values of depth, temperature, sound velocity and beam transmittance are listed by station in Table 1. Due to the fact that the six-conductor, 5/8" diameter cable associated with the beam transmissometer had to be lowered and retrieved by hand, the maximum depth of any data taken was approximately 100 m. Prior to bringing the first cast back to the surface, the output from the beam transmissometer was fed into a strip chart recorder. As the cast was returned to the surface at a constant speed, a continuous record of beam transmittance with time was made. Depth marks were made at approximately ten meter intervals. This record from the strip chart recorder was used in the determination of optimum positions for the Nansen bottles on the second cast. Again, it was attempted to position the bottles to obtain a greater number of samples in the area with the greatest change in transmittance with depth. Samples were taken from the Nansen bottles to determine oxygen content, particulate count, and chlorophyll. The particulate samples were treated with approximately 5 ml of Lugol's iodine solution* per 250 ml bottle [22,p24]. The particulate samples were analyzed upon completion of the cruise. Due to the short time available for this project it was not possible to analyze the chlorophyll samples.

## D. DATA REDUCTION PROCEDURE

### 1. Sound Velocity

It was intended to calculate approximate salinity values at the same depths as the transmittance and temperature data derived from the

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*The formula used for Lugol's iodine solution is: 1 g iodine and 3 g potassium iodine per 300 $cm^3$ distilled water.

first cast at each station. Leroy [16] has formulated equations for determining sound velocity from known values of temperature, salinity, depth and latitude. His equations are based on the data used by Wilson [21] for determining sound velocity. However, Leroy's equations use depth and latitude for the computation of absolute pressure and are much shorter and easier to handle than those of Wilson.

Leroy's basic formula, which covers practically the entire range of variations of salinity, temperature, and depth encountered in ocean waters with very good accuracy is:

$$V = V_o + V_a + V_b$$

where: $V_o = 1492.9 + 3(T-10) - 6 \times 10^{-3}(T-10)^2 - 4 \times 10^{-2}(T-18)^2 + 1.2(S-35) - 10^{-2}(T-18)(S-35) + \frac{Z}{61}$

$$V_a = 10^{-1}\,\delta^2 + 2 \times 10^{-4}\,\delta^2(T-18)^2 + 10^{-1}\,\delta\,\frac{\phi}{90}$$

$$V_b = 2 \times 10^{-7}\,T(T-10)^4$$

V = sound velocity in meters per second

T = temperature in degrees centigrade

S = salinity per mil

Z = depth in meters

$\delta = \frac{Z}{1000}$ , the depth in kilometers

$\phi$ = latitude in degrees

As values of temperature, sound velocity, depth and latitude were available, salinity was to be determined by solving Leroy's sound velocity equation for salinity. The equation used was:

$$\text{Salinity} = \frac{S_a + S_b + S_c}{1.38 - .01T}$$

where: $S_a = V - 1492.9 - 3T + 30 + .006(T^2 - 20T + 100)$

$+ .04(T^2 - 36T + 324)$

$S_b = -\frac{Z}{1000} - .1(\frac{Z^2}{10^6}) - .002(\frac{Z^2}{10^6})(T^2 - 36T + 324)$

$S_c = -.0411(\frac{Z}{100}) - .0000002(T)(T - 10)^4 + 42 - .35T + 630$

A program was set up to solve this equation using a digital computer. All attempts to use this equation with the cruise data failed in that the resulting salinities were in the range of 30 parts/thousand. Historical data and data taken by Hopkins Marine Station at approximately the same period in Monterey Bay indicate the salinities should be in the range of 33 parts/thousand during the cruise period. These low calculated values of salinity were used in Leroy's original equation for sound velocity and the corresponding value of sound velocity was determined each time it was attempted.

Lovett [18] used Wilson's original sound velocity equation to solve for salinity. He found that the SV/T/P (sound velocity, temperature, pressure) instrument is at least capable of giving the gross features of the salinity profile, even though it did not approach the accuracy possible with an in situ induction salinometer.

LT Garcia of the Naval Postgraduate School has used Leroy's formula to solve for salinity. He has concluded that, although his salinity values do not appear to be extremely accurate, they at least yield a rough profile of salinity.

SV/T/D temperatures obtained during the cruise were found to agree with the XBT temperatures taken (Appendix). During the cruise the SV/T/D probe depths were found to agree with meter wheel depths.

As sound velocity is by far the dominating factor in the given salinity equation, it is concluded that the values of sound velocity are in error. Therefore, the values of sound velocity are given in Table 1 as relative values only and salinity was not considered in this investigation. It is believed that the values of sound velocity are consistently low by approximately 3 m/sec.

2. Oxygen

The Winkler method, as described by Carritt and Carpenter [6], was used to determine the oxygen content at selected depths. All the samples were "pickled" immediately after being removed from the Nansen bottles and titrated within four hours during the cruise. Upon completion of the cruise, the dissolved oxygen in each sample (ml/l) was determined by the following formula:

$$DO_s = \frac{(R_s - R_b)\ 559.8}{(R_{st} - R_b)(V_b - 2)} - .02$$

where: $DO_s$ = dissolved oxygen in sample (ml/l)

$R_s$ = burette reading for sample (ml/l)

$R_b$ = value of reagent blank (ml)

$R_{st}$ = burette reading for standard (ml)

$V_b$ = volume of sample bottle (ml)

A PDP-8/S digital computer was used to solve this equation for each sample. The use of this computer was found to be a very quick and efficient method for determining the dissolved oxygen content for a large number of samples.

Oxygen data are given in Table 2.

3. Particulate Count

The particulate count of each sample was determined using a Model A Coulter Counter. Every sample was run at least twice at the zero threshold setting. If these values were not well within 10% of each other, then a third run was made and the middle value of the three recorded. The samples were repeatedly stirred by hand with a glass rod to insure against any settling of the particles to the bottom. As it was anticipated that the majority of particles would be found in the 0 - 10 $\mu$ range, a threshold setting of 5 was also used. The particulate data are listed in Table 2. In order to conserve time in the tedious process of using the Coulter Counter, not all runs were carried out completely to the 100 threshold setting. A run was terminated when the difference between any two successive threshold settings was 10 counts or less.

## III. ANALYSIS OF DATA

### A. INTRODUCTION

The data was looked at in several ways in order to determine the possible relationships between oxygen, temperature, particulate content and beam transmittance.

The values of temperature, oxygen, particulate count and beam transmittance were plotted against depth for each station. A computer program used by Yeske and Waer [22,p111] was modified somewhat to plot the station profiles (figures 41 - 83).

Vertical contours of beam transmittance and particulate count, beam transmittance and temperature, and beam transmittance and oxygen content were constructed for the following seven lines of stations: A1 to A12, B1 to B12, E1 to E7, G7 to F3, I1 to I9, K9 to J4, M2 to M6. These contours are presented in figures 4 through 24.

The depth, time, latitude and longitude, weather data, and values of sound velocity, temperature, and beam transmittance at the sampled depths for each station are listed in Table 1.

Table 2 contains the particulate count at each threshold setting of the Coulter Counter and also the oxygen content for the sampled depths. These are listed by stations in table format.

Horizontal contours of beam transmittance, particulate count, oxygen, and temperature were drawn for depths of zero meters, twenty meters, forty meters, and sixty-one meters. These contours are figures 25 through 40.

B. TABLE OF SOUND VELOCITY, TEMPERATURE, AND BEAM TRANSMITTANCE

From this data the average sea surface temperature for the 86 stations was determined to be 14.44°C. This value is in agreement with Bolin [5,pv] who has described the Oceanic Period as the warmest of the year with surface temperatures averaging more than 13°C.

The coldest sea surface temperature was 13.40°C at station A1 in Monterey Bay. Six of the stations in Monterey Bay, A7 through A12, had sea surface temperatures less than 14°C. With the exception of stations B1, B2, and J1, all other stations had sea surface temperatures greater than 14°C.

The average beam transmittance value at the surface for the 86 stations is 70%.

C. PROFILES OF PARTICULATE COUNT, OXYGEN CONTENT, TEMPERATURE AND TRANSMITTANCE

At stations where a strong thermocline could be detected, there was usually found a maximum particulate count within this thermocline. No specific location of this maximum within the thermocline was evident, as the maximum was found as often in the top portion of the thermocline as it was in the middle and bottom portions of the thermocline.

Twenty-three stations showed a definite decrease in oxygen content with a maximum particulate count (A4, A6, A7, A8, A9, B4, B7, B8, B10, B11, C2, E1, E6, G3, I2, I3, I7, I8, K8, K9, K10, L2, M4). This comparison was made at depths at least 20 meters from the bottom. In the vicinity of the bottom it was expected that the particulate count would be high and the oxygen content low.

The decrease in oxygen associated with the maximum particulate count may possibly indicate the consumption of oxygen by seston.

The stations taken during hours of darkness were examined to see if there was any trend for the layer of maximum particulate count to be closer to the surface during this time. No such trend was evident, however.

The two stations in the northernmost part of Monterey Bay, A12 and B1, had by far the highest particulate count and lowest transmittance values of any of the 86 stations. This is discussed below on page 26.

## D. VERTICAL CONTOURS OF BEAM TRANSMITTANCE, PARTICULATE COUNT, TEMPERATURE AND OXYGEN

The following relative terms are used to define the various water masses:

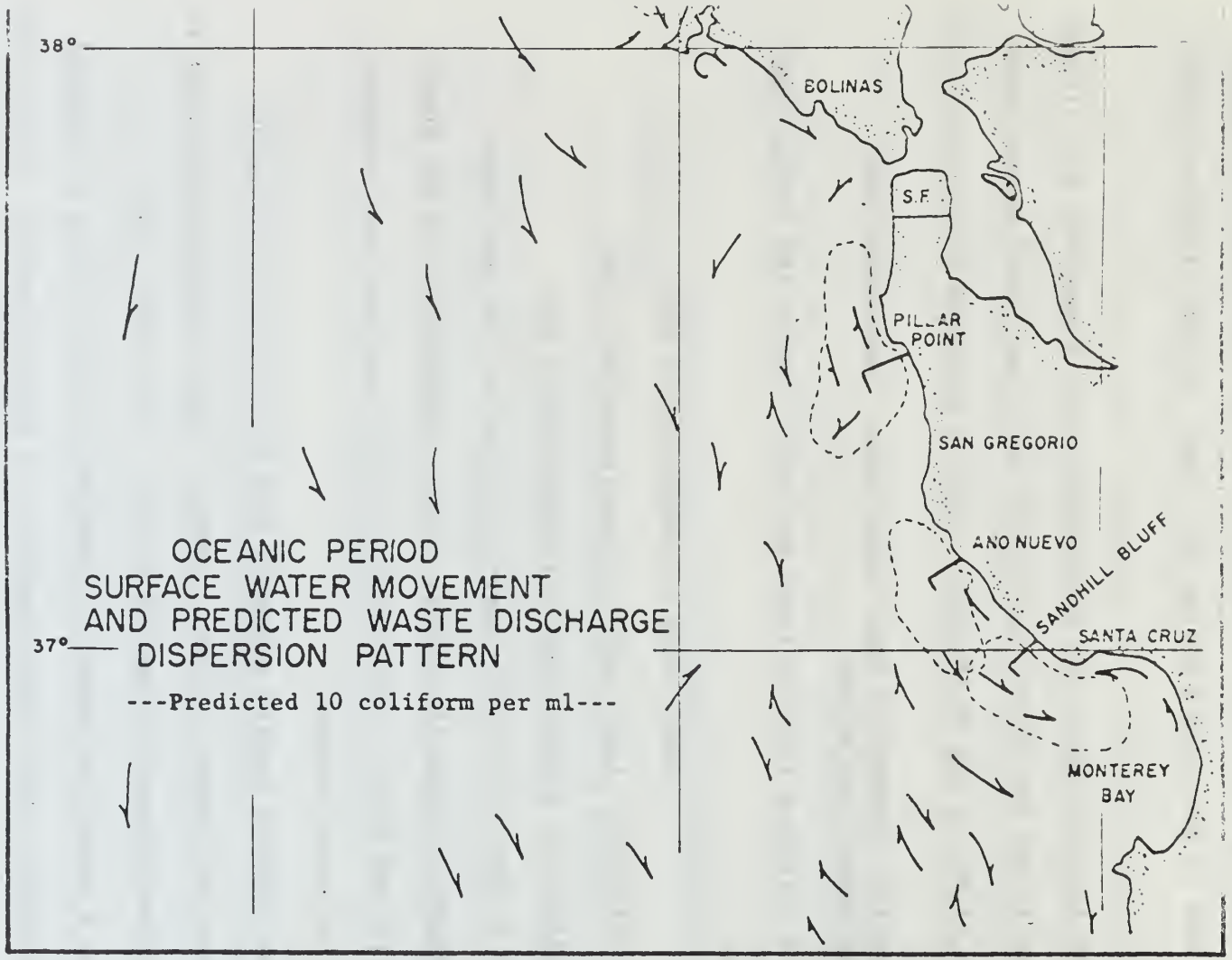
"clear" water = transmittance > 70%

"relatively clear" water = transmittance 50% - 60%

"relatively turbid" water = transmittance < 50%

Figure 3 shows one possible current pattern for the area under investigation during the Oceanic Period, suggested by the Bay Study Group [7] and based on some studies of this area made over a number of years by various workers.

The vertical profile extending from stations A1 to A12 across Monterey Bay (figure 4) shows an area of "clear" water which extends to the surface between stations A9 and A10. This water spreads and reaches a depth of 60 meters at stations A2 and A8. This is bordered by "relatively clear" water from A2 to A8 above 60 meters. Another area of interest in figure 4 is the 60 to 90 meter depth between stations A5 and A6 over Monterey Canyon. Here the water changes from "clear" to




[From Bay Delta Study 1968]

Figure 3

"relatively turbid", and the particulate count increases. Also station A12 is shown to have "relatively turbid" water and high particulate count. Figure 5 shows a band of water with temperatures between 13.4° and 13.8°C coming in at the surface between stations A10 and A11, which sinks and follows approximately the same pattern as the "clear" water above 60 meters. Between 60 and 90 meters figure 5 shows the temperatures in this area to be closely related to those at the same depth along the sides of the Canyon. Figure 6 shows an area of oxygen content between 5.4 ml/l and 5.2 ml/l closely following the area of "clear" water above 60 meters. Figure 7 shows an area of "clear" water and low particulate count between stations B4 and B9 which extends from the surface down to approximately 60 meters. Again in the area between 60 to 90 meters the water becomes "relatively turbid" and the particulate count increases. The water in the vicinity of station B12 has a high particulate count and "relatively turbid" water. The temperatures in the 60 to 90 meter region (figure 8) again appear to be closely related to those at the same depth along the sides of the Canyon. Figure 9 shows the oxygen content in the water between 60 to 90 meters over the Canyon to be relatively low. In May 1969 the water around B1 and A12 was also "relatively turbid" with a high particulate count [14,p91], and the water over the Canyon between 60 and 90 meters was relatively turbid. However, in May the isotherms seemed to extend horizontally directly across the Bay [14,p92].

Even though the California Current coming down the coast at this time of year is classified as a cold current, it is relatively warm when compared with the coastal waters in the Monterey Bay area [19,p131]. Keeping this and the current structure shown in figure 3 in mind, it is

suggested that the California Current is entering Monterey Bay during this period and is centered roughly in the middle of the Bay.

The area of "relatively turbid" water in the Canyon between 60 and 90 meters appears to be the result of bottom currents running along the Canyon shelves. Gatze and Pizinger, in their study of bottom currents at the head of Monterey Canyon, found currents as great as 4 knots [9,p39]. in the Canyon and pointed out that if currents of similar strength exist on the surrounding shelves and slopes, there may be considerable transport of sediment into the Canyon from a large area.

From figure 3, one might expect the longshore current in Monterey Bay to be primarily northward with a closed eddy system from the northern side of Monterey Bay up the coast to Ano Nuevo. This eddy system - if it in fact exists - seems to circulate water nearshore in a counter-clockwise direction along the northern side of Monterey Bay up to Ano Nuevo, where it turns south and comes back to Monterey Bay and turns north again near Moss Landing [7,pVI-8]. "Turbid" water is not present to the north of Santa Cruz at station F7. The "turbid" water at stations A12 and B1 may be attributed to littoral material with some sewage outflow and coastal runoff being carried into the eddy system and remaining entrapped in its closed circulation. It should also be noted that these are very shallow stations, having depths of 17 meters and 16 meters respectively, and tidal action may also be contributing to this "turbid" water.

Figure 10 shows an area of "clear" water and low particulate count from the surface down to 100 meters between stations E1 and E2. This area also has higher temperatures than the water nearer the coast (figure 11). An area of this nature with "clear" water, low particulate

count, and higher temperatures was not noticed during May 1969 [14,p97]. Again this appears to be the area of the eastward edge of the southward flowing California Current.

Figures 10 through 15 show the first three or four stations nearest the coast to have "relatively turbid" water, high particulate count, high temperatures and high oxygen content between 20 and 40 meters. According to Bolin [5,pv], the Davidson Current starts flowing northward along the coast in November. Due to the coriolis force, the surface water of this current runs up to the shore and sinks. From these contours it appears that there is downwelling taking place just south of Pt. Ano Nuevo and just north of Santa Cruz. This was not in evidence during May 1969, when upwelling was actually occurring [14,p44].

The temperature contours between stations G1 and G3 (figure 14), however, show the characteristics of a possible "cold spot". "Cold spots" are dome-like in their three-dimensional structure and may possibly be formed (primarily by tidal action) over an irregular bottom [15,p238]. They normally have a diameter not greater than about three miles, with the broadest extent of mixed water and the lowest temperatures in the deepest levels [15,p238]. A "cold spot" was also possibly in evidence at stations J4 and J5 off Pt. Ano Nuevo during May 1969 [14,p102].

Figures 16 and 17 show a band of "clear" water, low particulate count and relatively high temperatures between stations I3 and I8. Figure I8 shows the oxygen content to be increasing from the coast seaward to station I3. Again this appears to be the eastward edge of the sourtward flowing California Current. During May 1969 this area

had relatively high values of particulate count and the isotherms were fairly horizontal from the coast seaward [14,p104].

A band of "clear" water and low particulate count is present from the surface to approximately 60 meters between stations K5 and K9 (figure 19). Figure 20 shows the isotherms moving up towards the surface from station K7 seaward. The highest oxygen content in this area is between the surface and 20 meters seaward from station K7 (figure 21).

In May 1969, this area also had "clear" water and low particulate count, but the isotherms appeared to be bending down going seaward [14,p108], i.e. some upwelling was apparently there.

Figure 22 shows "relatively clear" water and low particulate count across the approach to San Francisco Bay. The isotherms (figure 23) and the isolines of oxygen (figure 24) are approximately parallel across this area. It appears that the California Current might possibly be entering this region at the approach to San Francisco Bay during this period of the year. In May 1969 the water above 20 meters in this area was "relatively turbid" with high values of particulate count [14,p112].

## E. HORIZONTAL CONTOURS OF BEAM TRANSMITTANCE, PARTICULATE COUNT, TEMPERATURE AND OXYGEN

Figures 25 through 28 show the beam transmittance values to be increasing seaward at depths of 0, 20, 40, and 61 meters. This trend was also evident in May 1969, but the overall values of beam transmittance were lower then at these depths [14,p86]. In May 1969 there was a localized area of very "turbid" water at the surface off Pt. Montara with beam transmittance less than 10%/m. This "turbid" water extended

seaward approximately 25 nmi [14,p77]. During November 1969, this surface water was "relatively clear" with beam transmittance ranging from 60 to 80%/m (figure 25).

The temperatures increase seaward (figures 33,34,35) at 0, 20, and 40 meters but at 61 meters (figure 36) the trend is reversed. At 61 meters the temperature between A1 and A6 in Monterey Bay is higher than any other location. Figure 40 shows the oxygen content between stations A1 and A8 at 61 meters to be the highest in the entire region studied. It appears that the southward flowing California Current does not reach a depth of 61 meters along the coast but does sink down to at least 61 meters in Monterey Bay.

At 20 meters (figure 30) the particulate count is relatively high along the coast as compared to the particulate count at the surface (figure 29) from Santa Cruz to Pt. Montara. At 40 meters (figure 31) this area of high particulate count appears to have moved seaward. The oxygen content in this same area at 40 meters (figure 39) is also relatively high. Again, this may be attributed to downwelling along the coast, where the downwelled water having a high oxygen content is traveling down the shelf and carrying with it the disturbed bottom sediment.

## E. COMPARISON OF BEAM TRANSMITTANCE AND PARTICULATE COUNT

Except for layers of relatively turbid water, the general trend for particulates was to decrease in total count with depth. An exception to this is noted for the waters along the coast and those near the bottom, which showed relatively high particulate counts.

Fifty-nine stations showed a good relationship between particulate count and transmittance, and nineteen stations showed a fair relationship. As particulate count increased the beam transmittance decreased.

G. COMPARISON OF BEAM TRANSMITTANCE AND TEMPERATURE

Where a strong thermocline was present, a layer of turbid water was usually located within the thermocline. Other than this, no correlation was noted between transmittance and temperature.

H. COMPARISON OF BEAM TRANSMITTANCE AND OXYGEN CONTENT

Twenty-three stations showed a definite decrease in oxygen content associated with a low value of beam transmittance and a high value for particulate count. It is not evident from this information alone that any correlation exists between transmittance and oxygen content.

I. COMPARISON OF PARTICULATE SIZE WITH DEPTH

At each station across Monterey Bay (A1-A12) the percentage of the total particulate count between the 0 and 10 threshold setting was greater at the deepest depth sampled than at the surface. Of the 12 stations sampled, 66% of the particulate count on the surface was between the 0 and 10 threshold setting and 75% of the particulates at the deepest depth sampled were between the 0 and 10 threshold setting. Therefore, the surface waters appear to contain coarser sediment than waters at depth for each of the stations sampled inside Monterey Bay.

There was a general trend for the total particulate count to decrease seaward and to decrease with depth except near the coast and near the bottom, where there was an increase in total particulate count.

A fairly good correlation seems to exist between total particulate count and percent transmittance, with the transmittance decreasing as the particulate count increases.

## IV. CONCLUSIONS

The average sea surface temperature in the coastal waters between San Francisco Bay and Monterey Bay during the period 7-14 November 1969 was 14.44°C, approximately 2°C higher than that for 10-18 May 1969.

The northern part of Monterey Bay has relatively turbid water, which may be attributed to the northward littoral current and a closed eddy circulation system between the northern portion of Monterey Bay and Pt. Ano Nuevo.

The middle of Monterey Bay is characterized by "clear" water with relatively high temperature down to a depth of approximately 60 meters. This appears to be the area where the California Current is entering Monterey Bay. Stations in lines perpendicular to the coast off Santa Cruz, off Pt. Ano Nuevo, off Pigeon Point, and off Pt. Montara also show this area of clear water and indicate the southward flow of the California Current. This current appears to be above 60 meters along the coast but sinks down to approximately 60 meters in Monterey Bay.

At a depth of 60 to 90 meters over the Monterey Canyon there is a patch of "relatively turbid" water with temperatures closely related to those near the canyon walls on either side. This "relatively turbid" water appears to be the result of currents running down along the sides of the Canyon.

The area just off the coast south of Pt. Ano Nuevo and just north of Santa Cruz has a layer of "relatively turbid" water, high temperatures, and high oxygen content between approximately 20 and 40 meters. It is suggested that the northward flowing Davidson Current has commenced and is impinging on the coast in these areas, and downwelling is taking place.

No indication of upwelling was present at this time.

At all of the stations along lines perpendicular to the coast there was an increase in beam transmittance with corresponding decrease in particulate matter in a direction seaward from the coast.

A fairly good correlation seems to exist between transmittance and particulate count.

A layer of maximum particulate count was often found to exist within the thermocline. Other than this, there was no obvious correlation between temperature and beam transmittance.

No simple relationship between beam transmittance and oxygen content was apparent.

The surface waters contain coarser sediment than the waters at depth at all 12 stations sampled across Monterey Bay.

Approximately 74 percent of all particulates observed appeared to be less than 6.2 $\mu$ in diameter.

## V. SUGGESTIONS FOR FUTURE RESEARCH

This investigation should be continued to cover the Davidson Current period; that is, during the period from November to January approximately.

Values of salinity (and density) would have been extremely useful in analyzing this data. If such a study is continued it is recommended that an STD be used or that salinity samples be taken.

It would be of interest to run the particulate samples again to see what aging effects, if any, are present in the samples preserved with Lugol's solution.

A thorough investigation of the "relatively turbid" water in the northern part of Monterey Bay should be undertaken. In addition to the parameters used in this study, measurements of phosphate and nitrogen should be made, and biological samples should be taken to determine the actual source of the high particulate count found in that area.

Further studies should be made of the bottom currents along the Canyon shelf area.

Lastly, the chlorophyll samples taken during this cruise should be analyzed and the results compared with results found in this study.

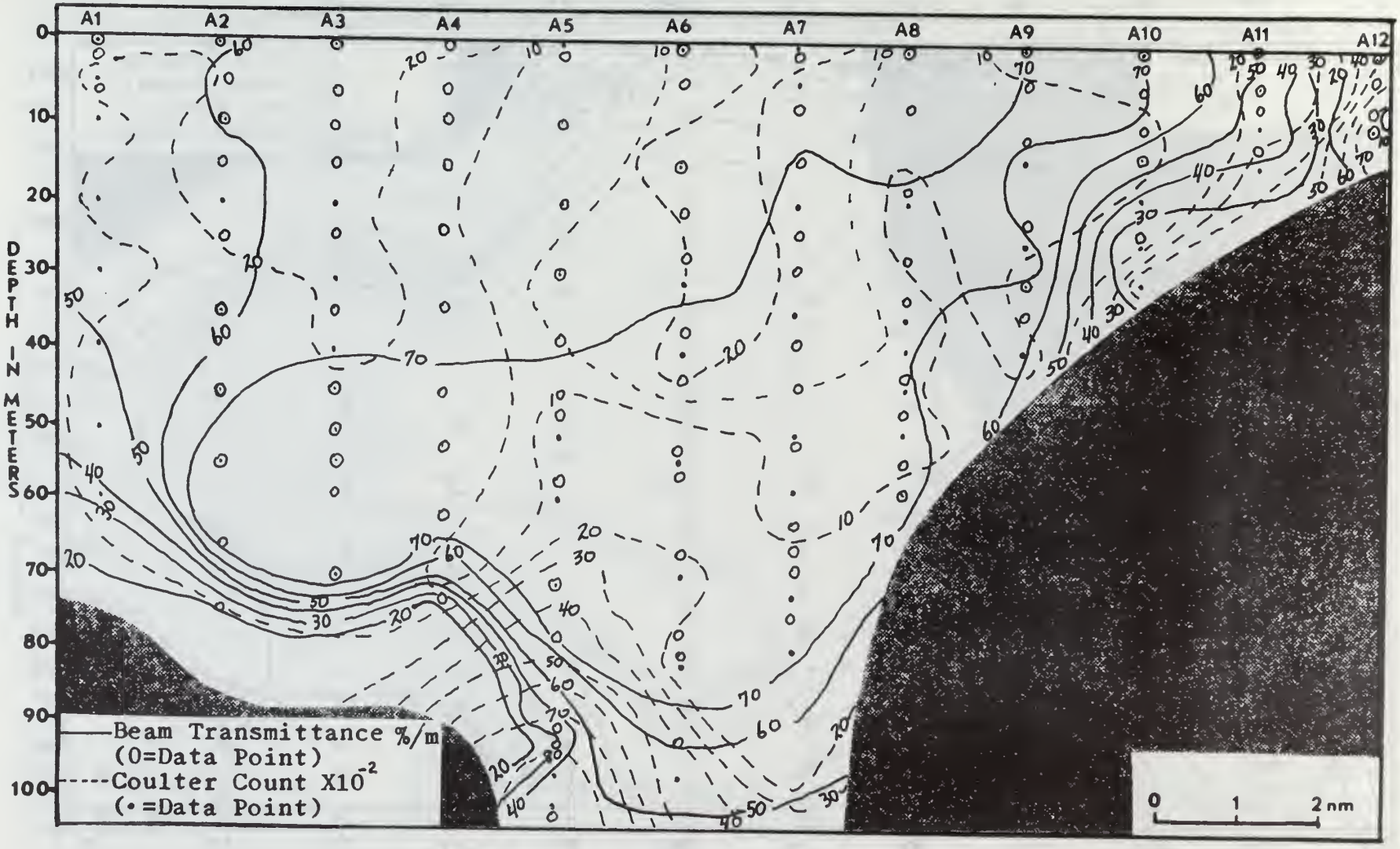

A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Coulter Count X10⁻²
(•=Data Point)
0
1
2 nm

**FIGURE** 4

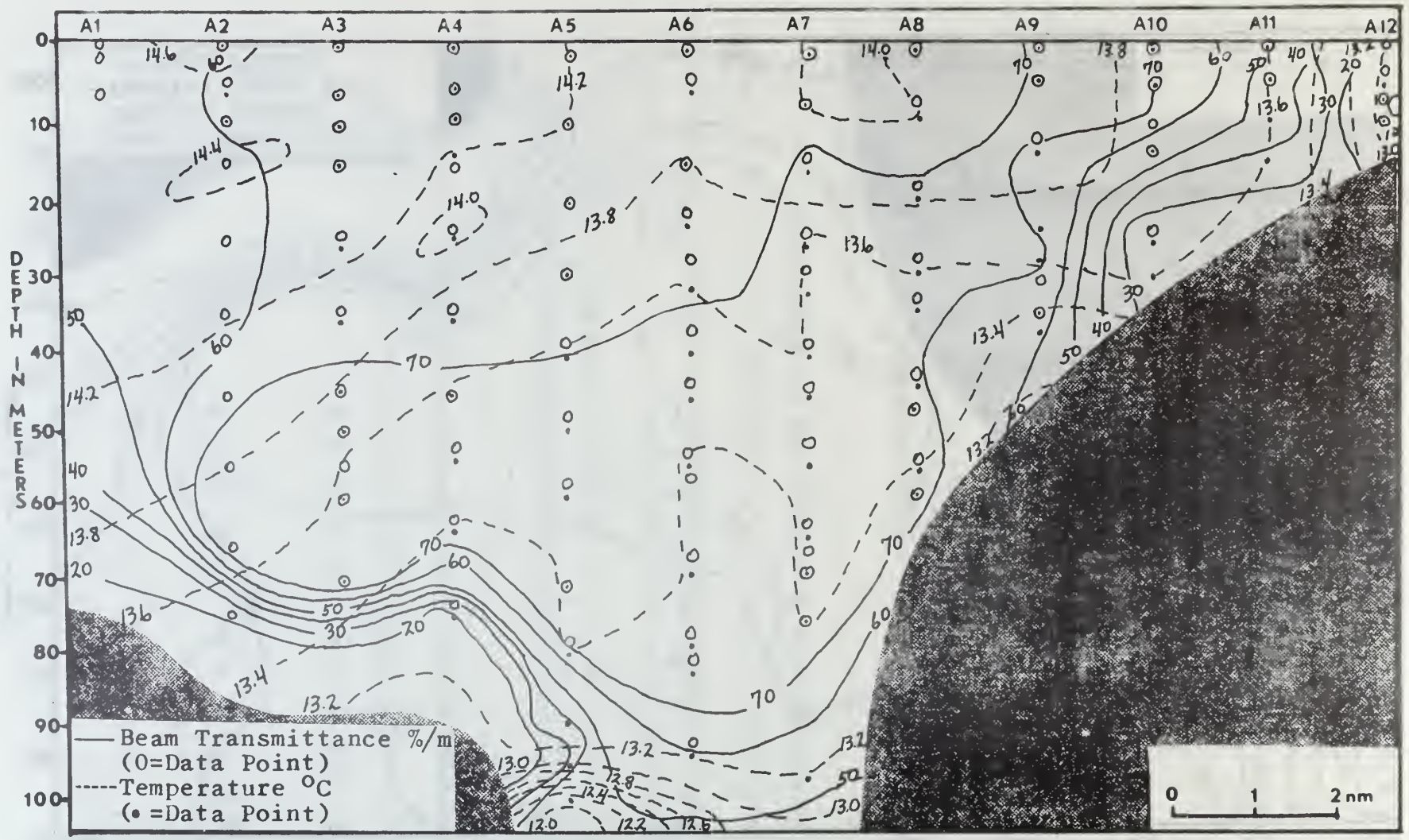

A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Temperature °C
(• =Data Point)
0
1
2 nm

**FIGURE** 5

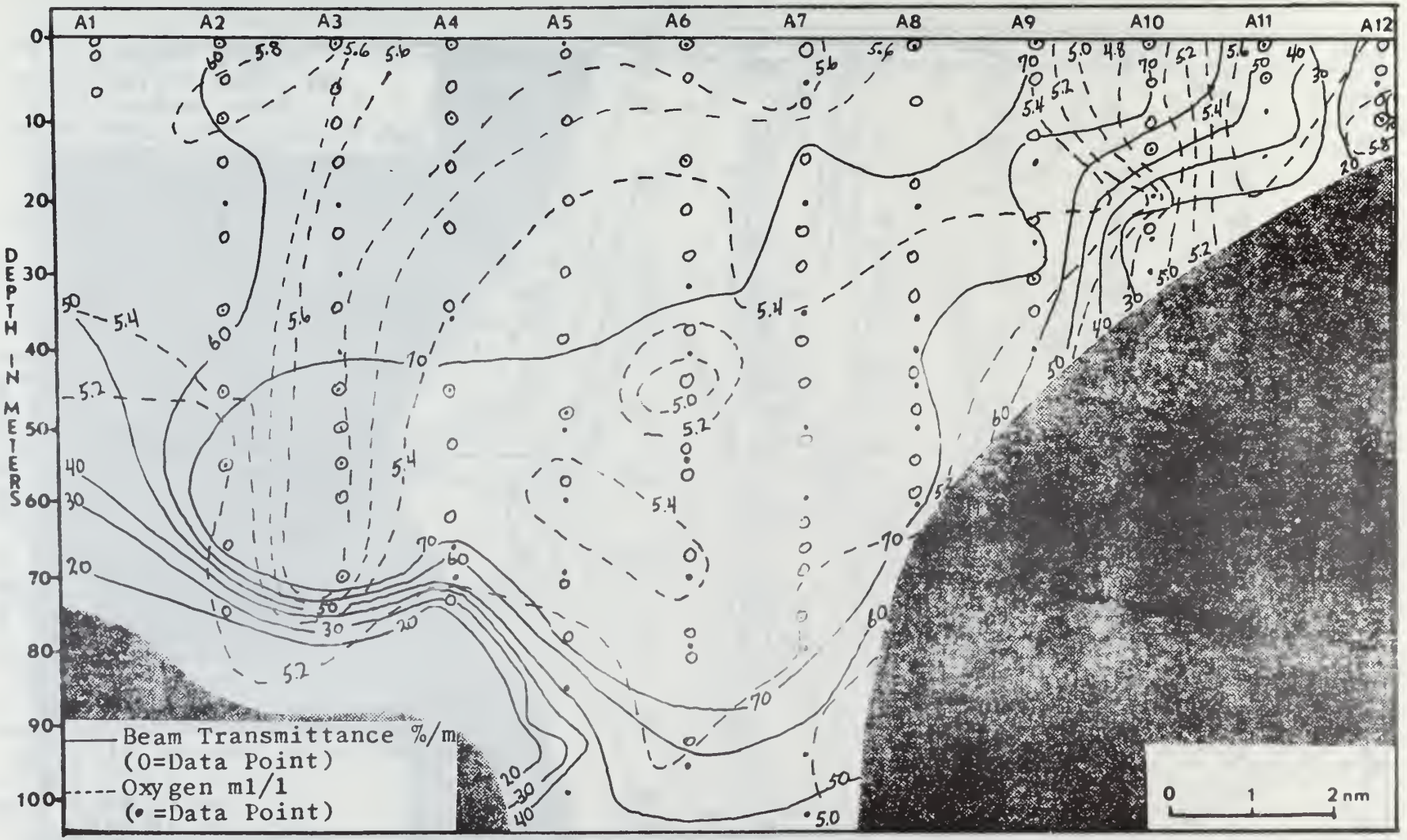

A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Oxygen ml/1
(• =Data Point)
0
1
2 nm

**FIGURE** 6

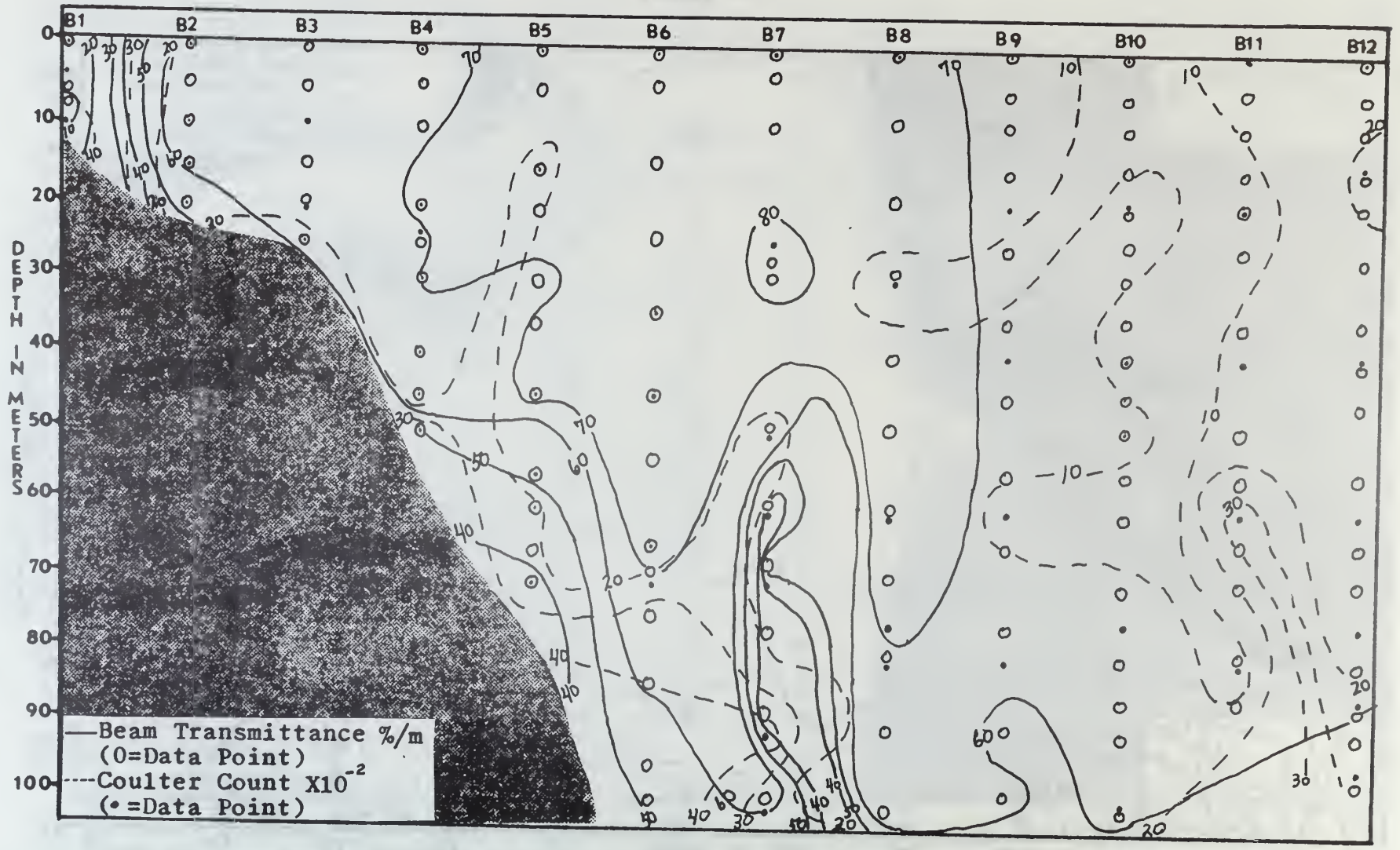

B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
—Beam Transmittance %/m
(0=Data Point)
----Coulter Count X10$^{-2}$
(• =Data Point)

FIGURE 7

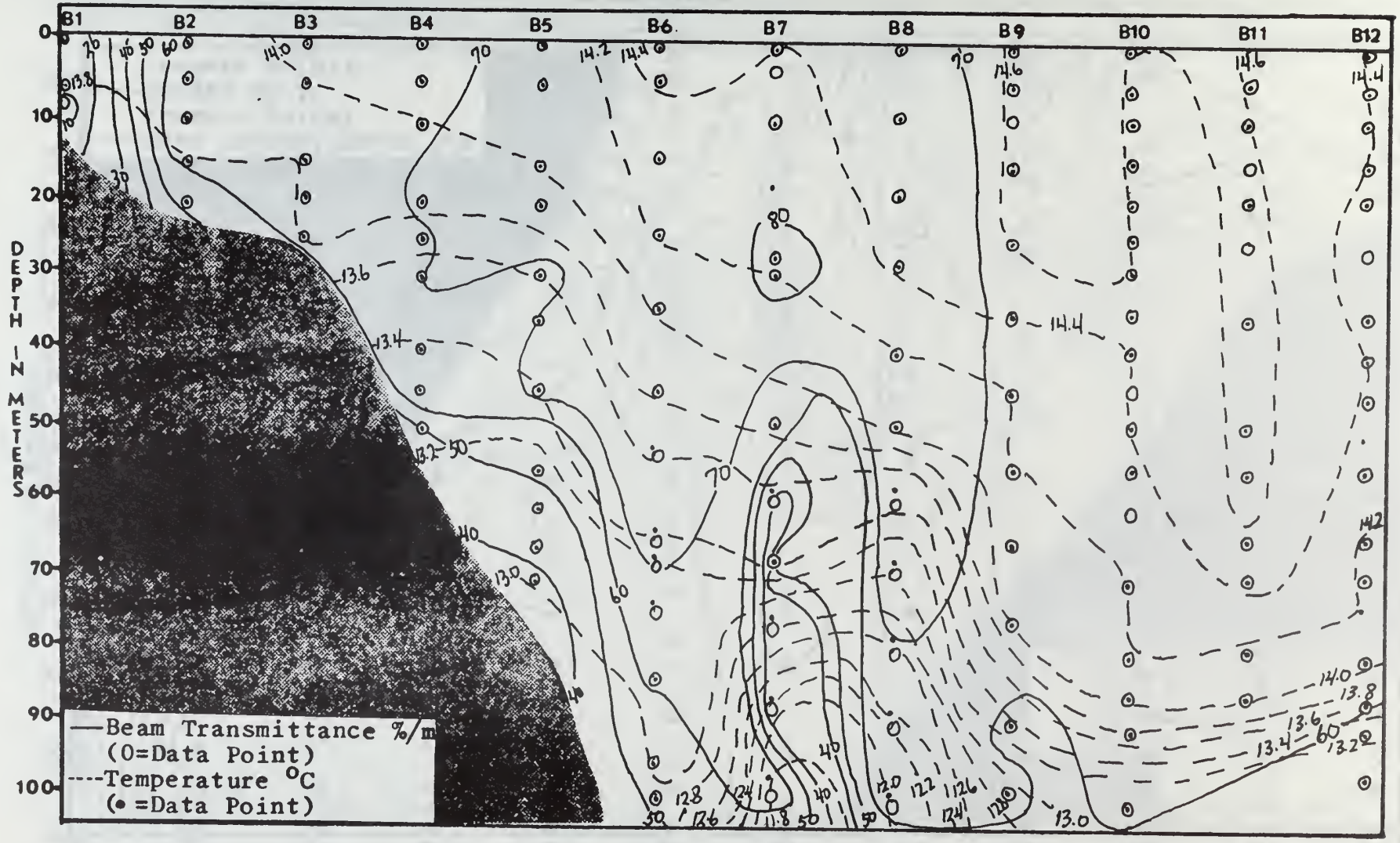

B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
DEPTH - IN METERS
0
10
20
30
40
50
60
70
80
90
100
—Beam Transmittance %/m
(0=Data Point)
----Temperature °C
(• =Data Point)

FIGURE 8

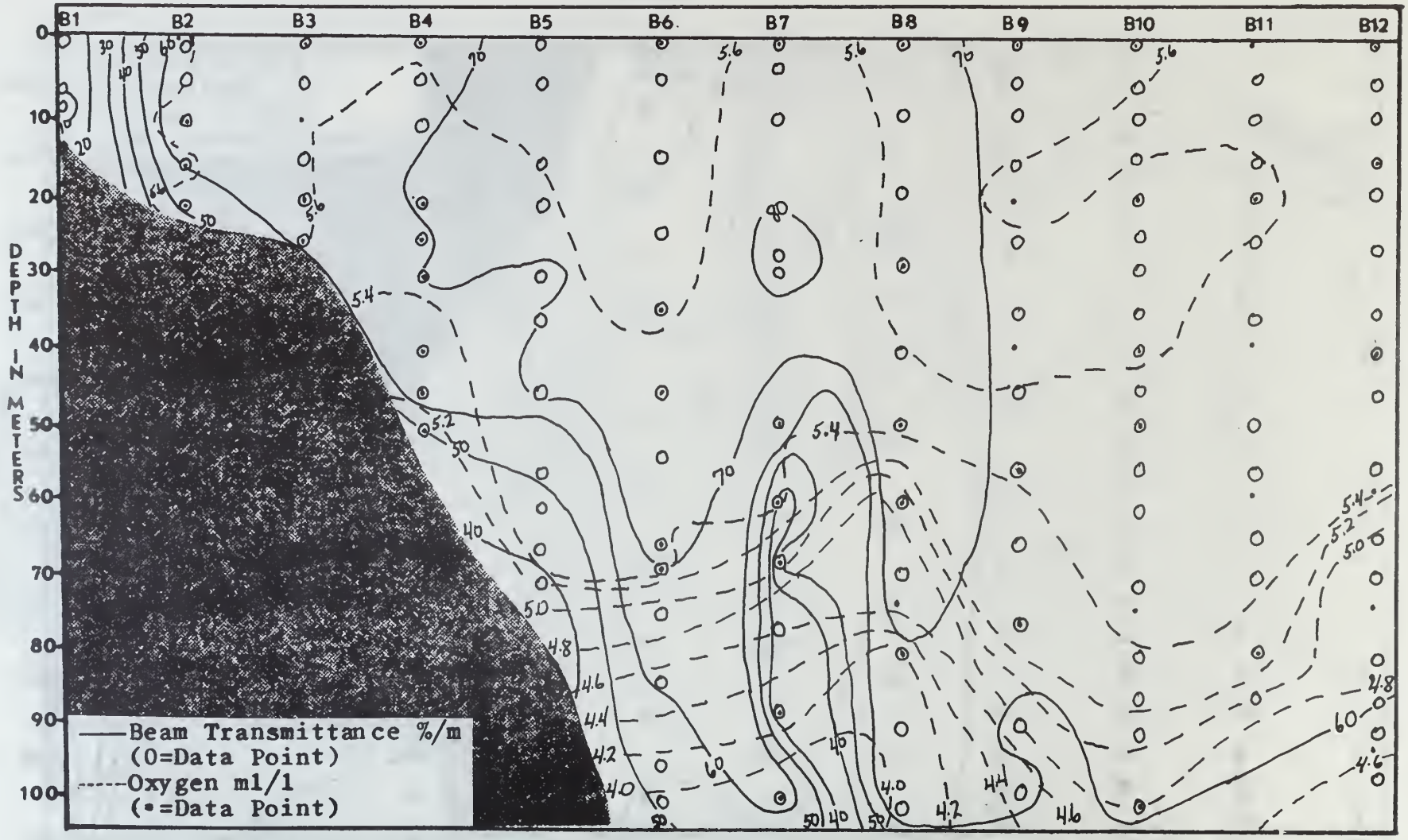

B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
——Beam Transmittance %/m
(0=Data Point)
-----Oxygen ml/l
(•=Data Point)

FIGURE 9

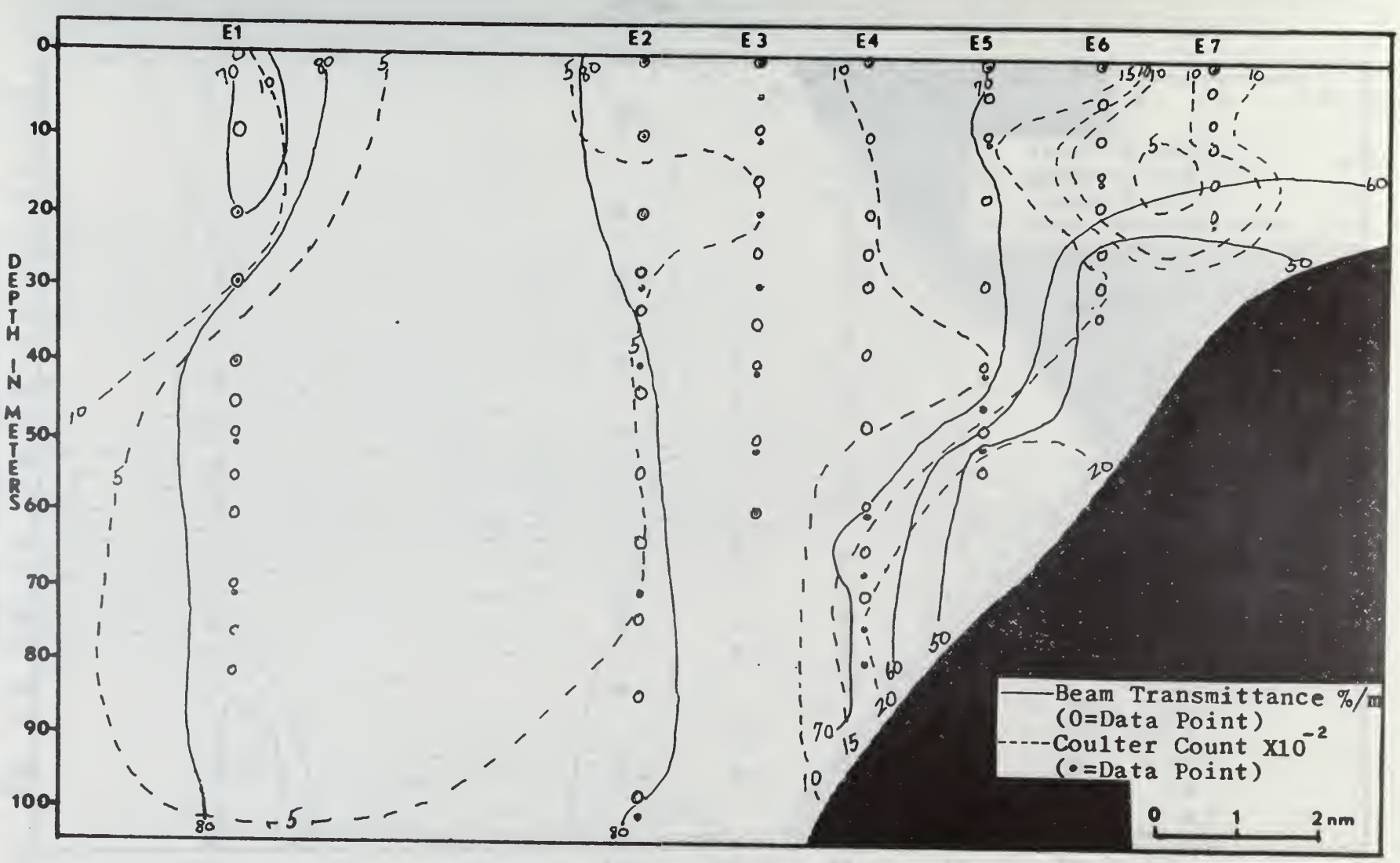

E1
E2
E3
E4
E5
E6
E7
DEPTH - IN METERS
0
10
20
30
40
50
60
70
80
90
100
——Beam Transmittance %/m
(0=Data Point)
----Coulter Count X10⁻²
(•=Data Point)
0
1
2 nm

**FIGURE** 10

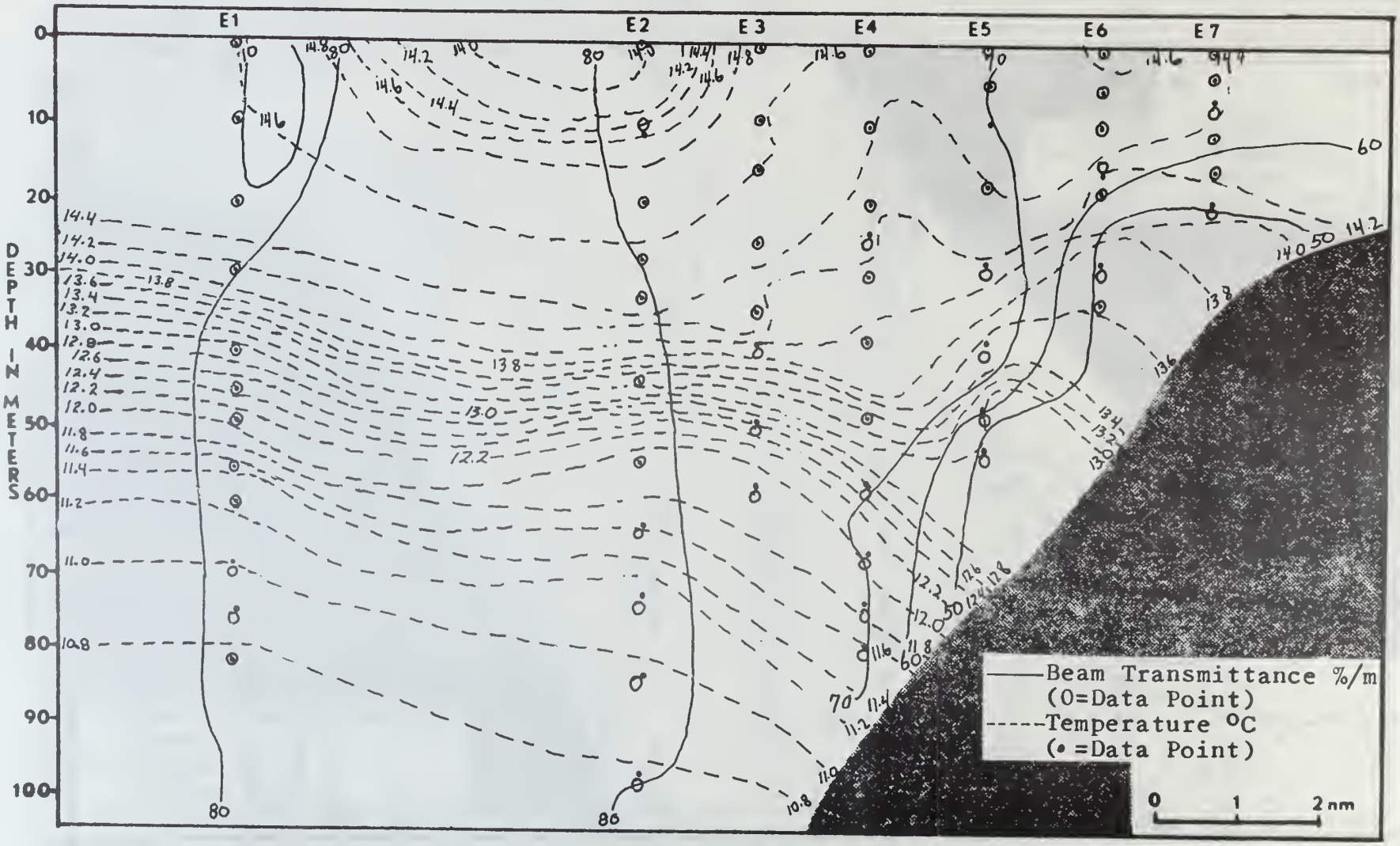

E1
E2
E3
E4
E5
E6
E7
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
——Beam Transmittance %/m
(0=Data Point)
-----Temperature °C
(• =Data Point)
0
1
2 nm

**FIGURE** 11

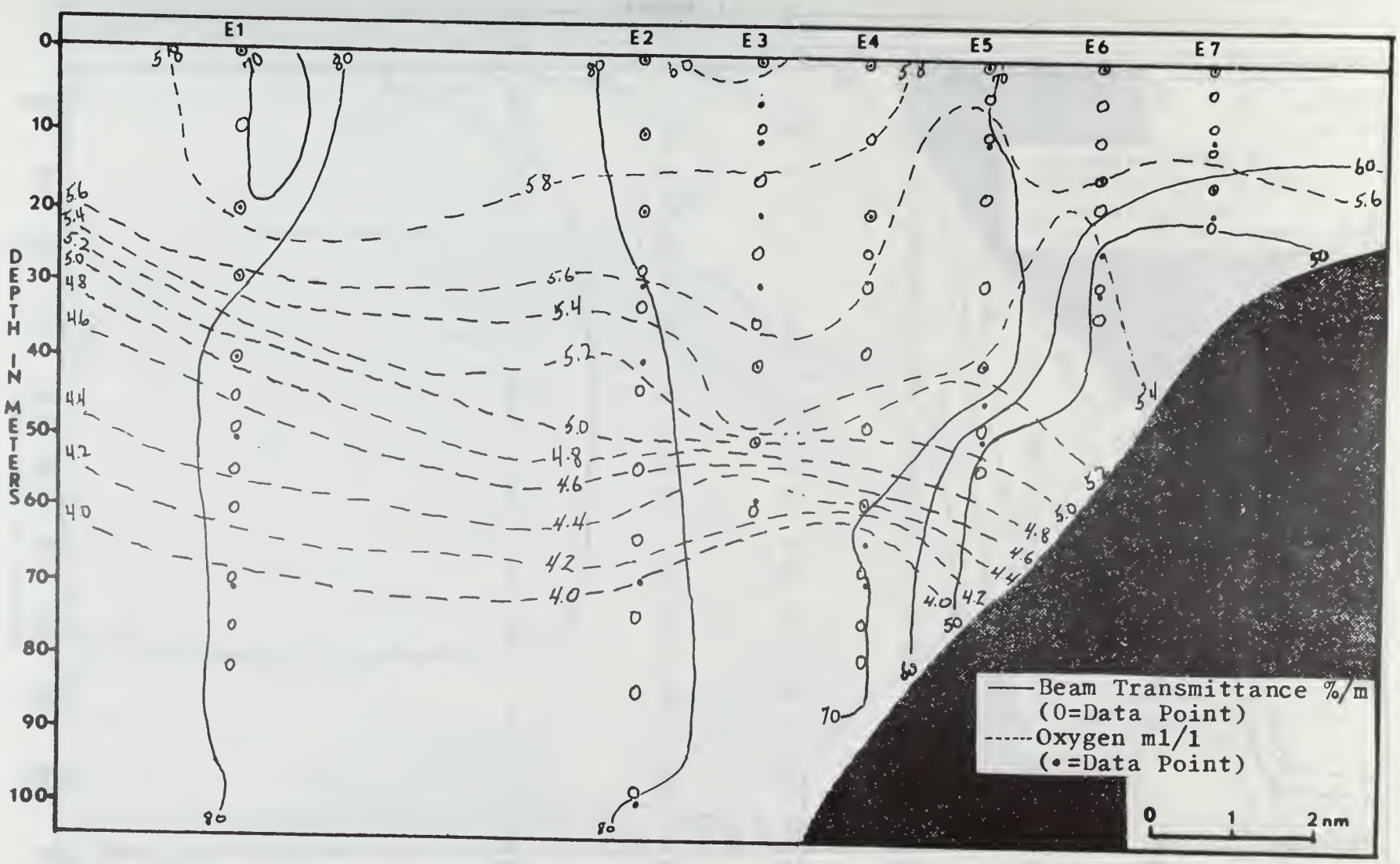

E1
E2
E3
E4
E5
E6
E7
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Oxygen ml/l
(•=Data Point)
0
1
2 nm

**FIGURE** 12

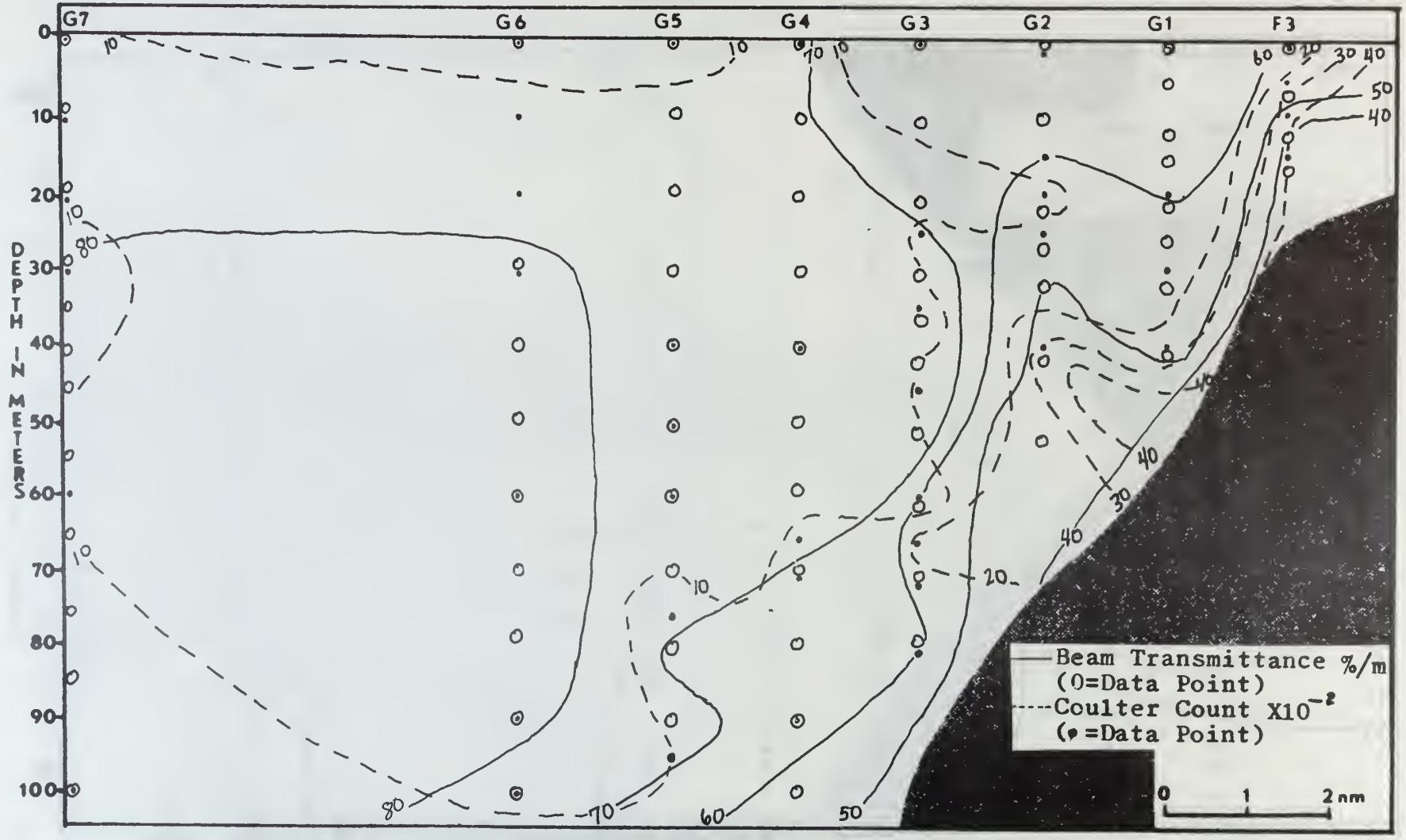

G7
G6
G5
G4
G3
G2
G1
F3
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(O=Data Point)
Coulter Count X10⁻²
(• =Data Point)
0
1
2 nm

FIGURE 13

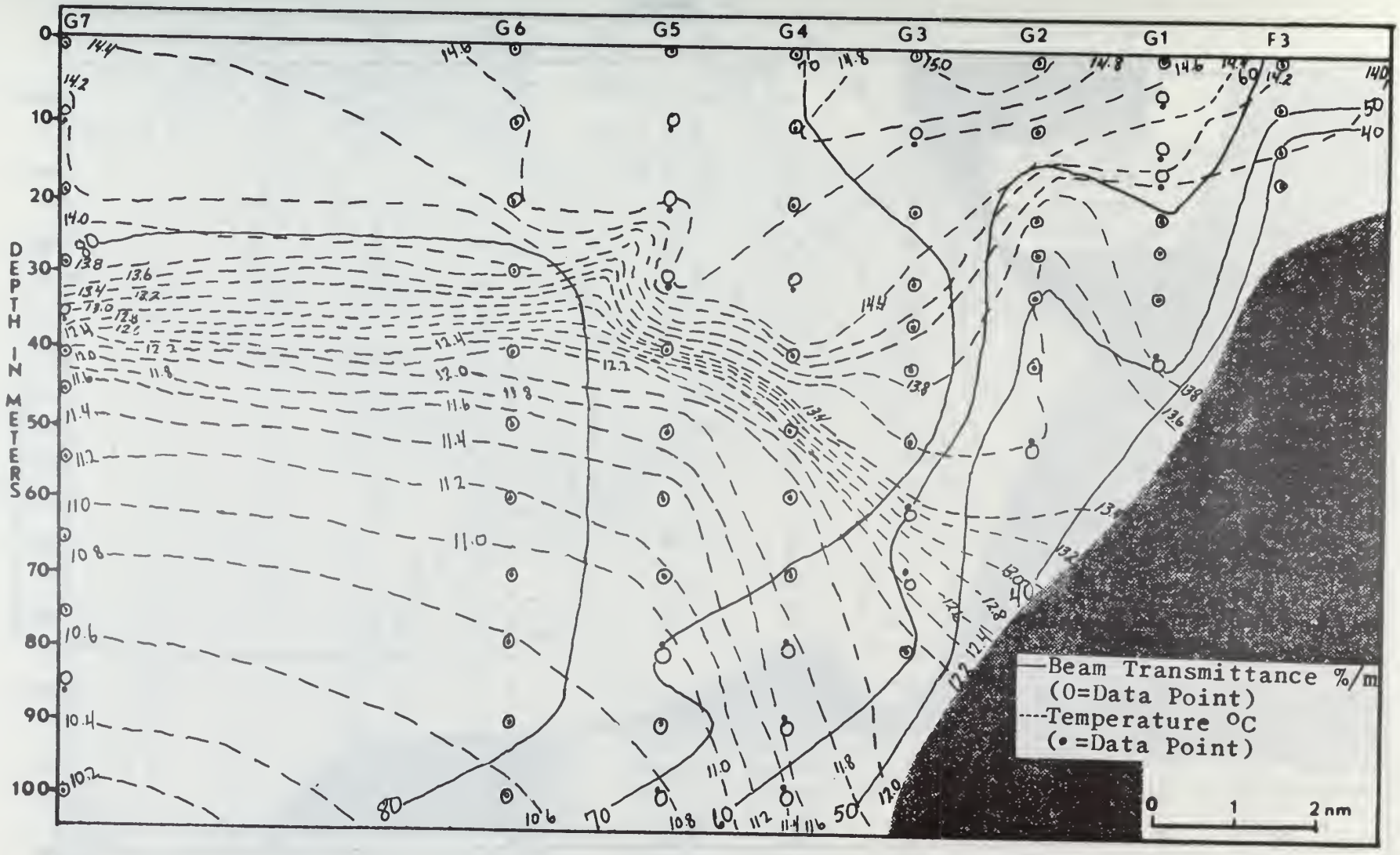

G7
G6
G5
G4
G3
G2
G1
F3
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Temperature °C
(•=Data Point)
0
1
2 nm

**FIGURE** 14

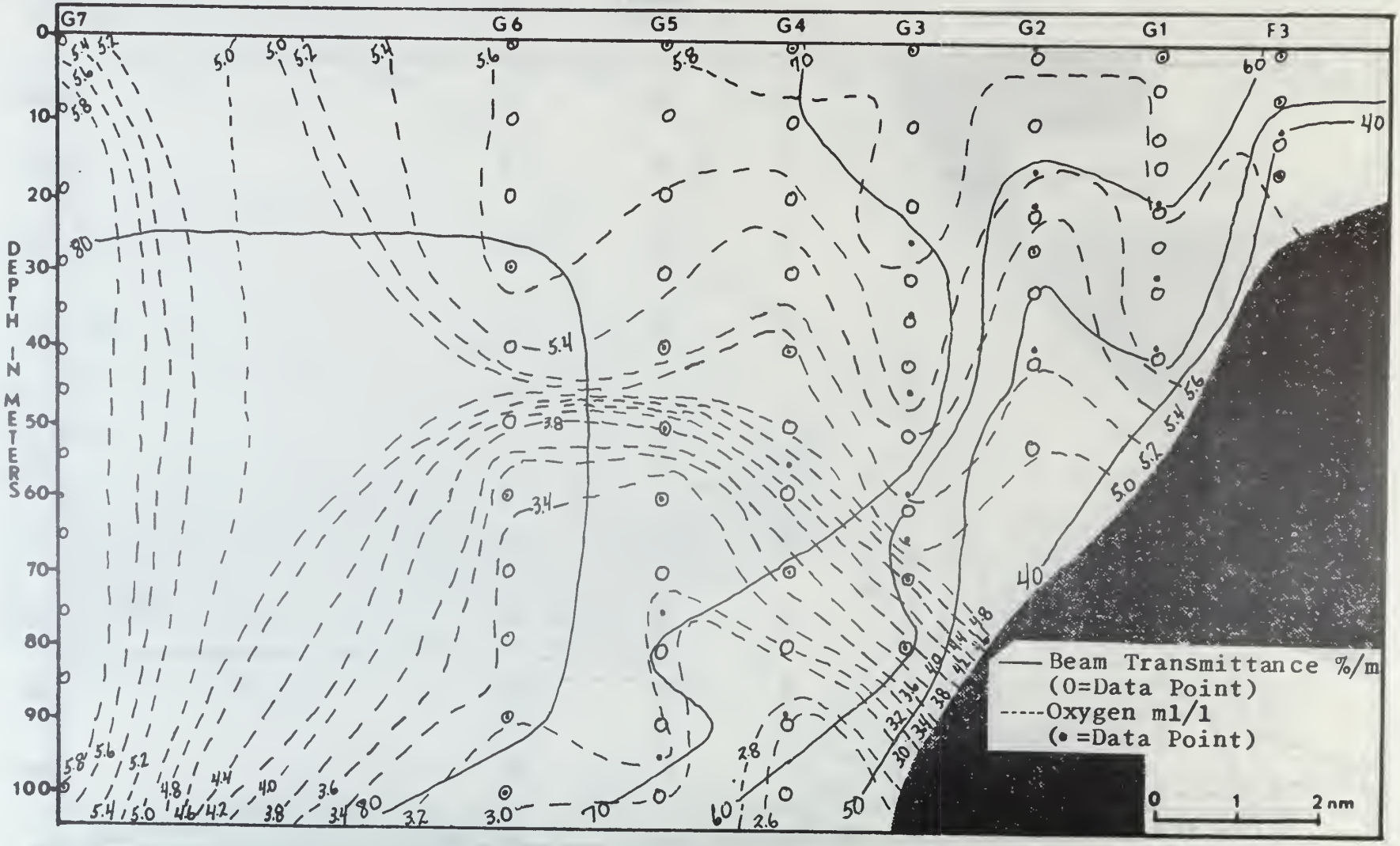

G7
G6
G5
G4
G3
G2
G1
F3
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
-----Oxygen ml/l
(• =Data Point)
0
1
2 nm

**FIGURE** 15

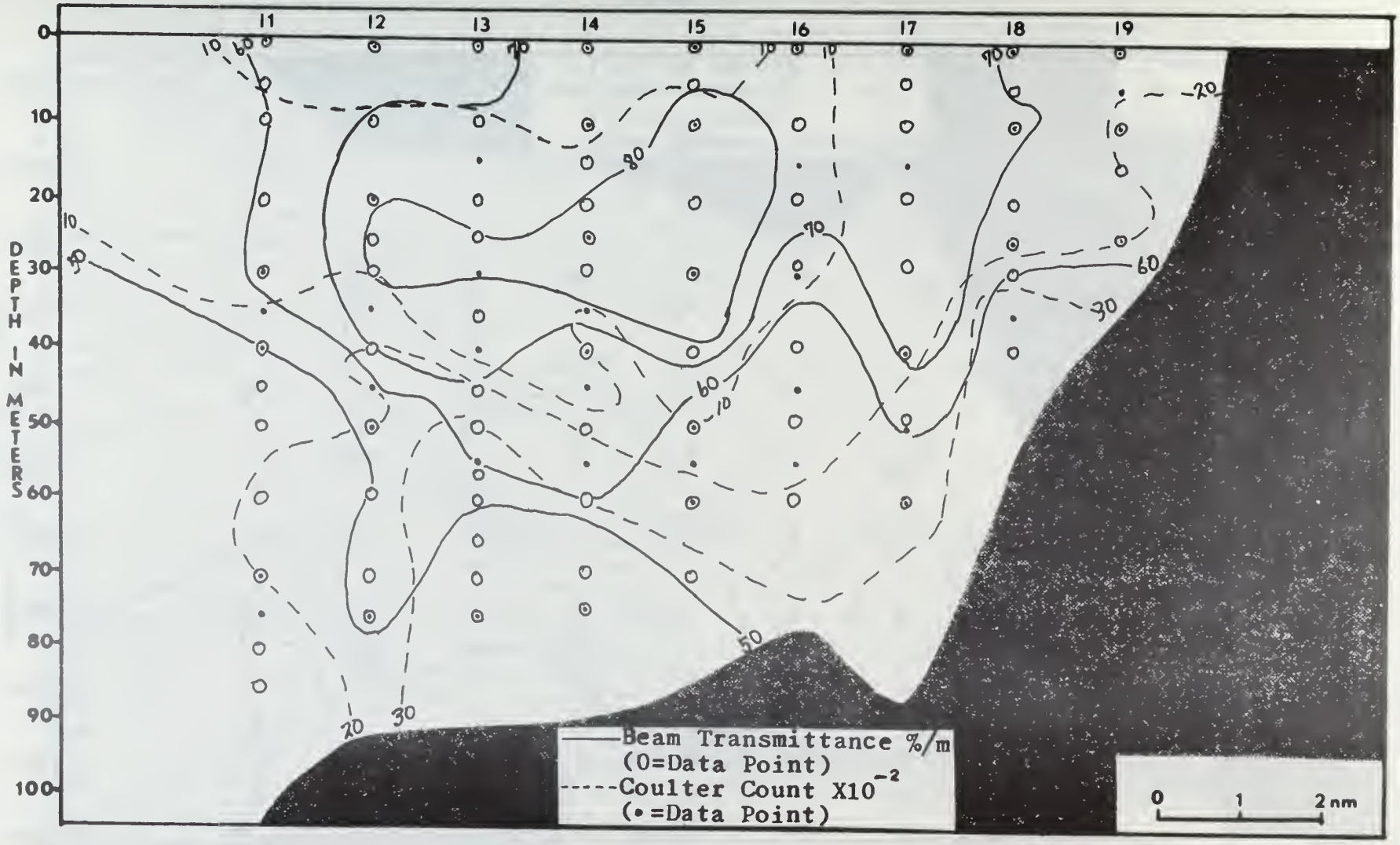

11
12
13
14
15
16
17
18
19
0
10
20
30
40
50
60
70
80
90
100
DEPTH IN METERS
Beam Transmittance %/m
(O=Data Point)
Coulter Count X10^-2
(•=Data Point)
0
1
2 nm

FIGURE 16

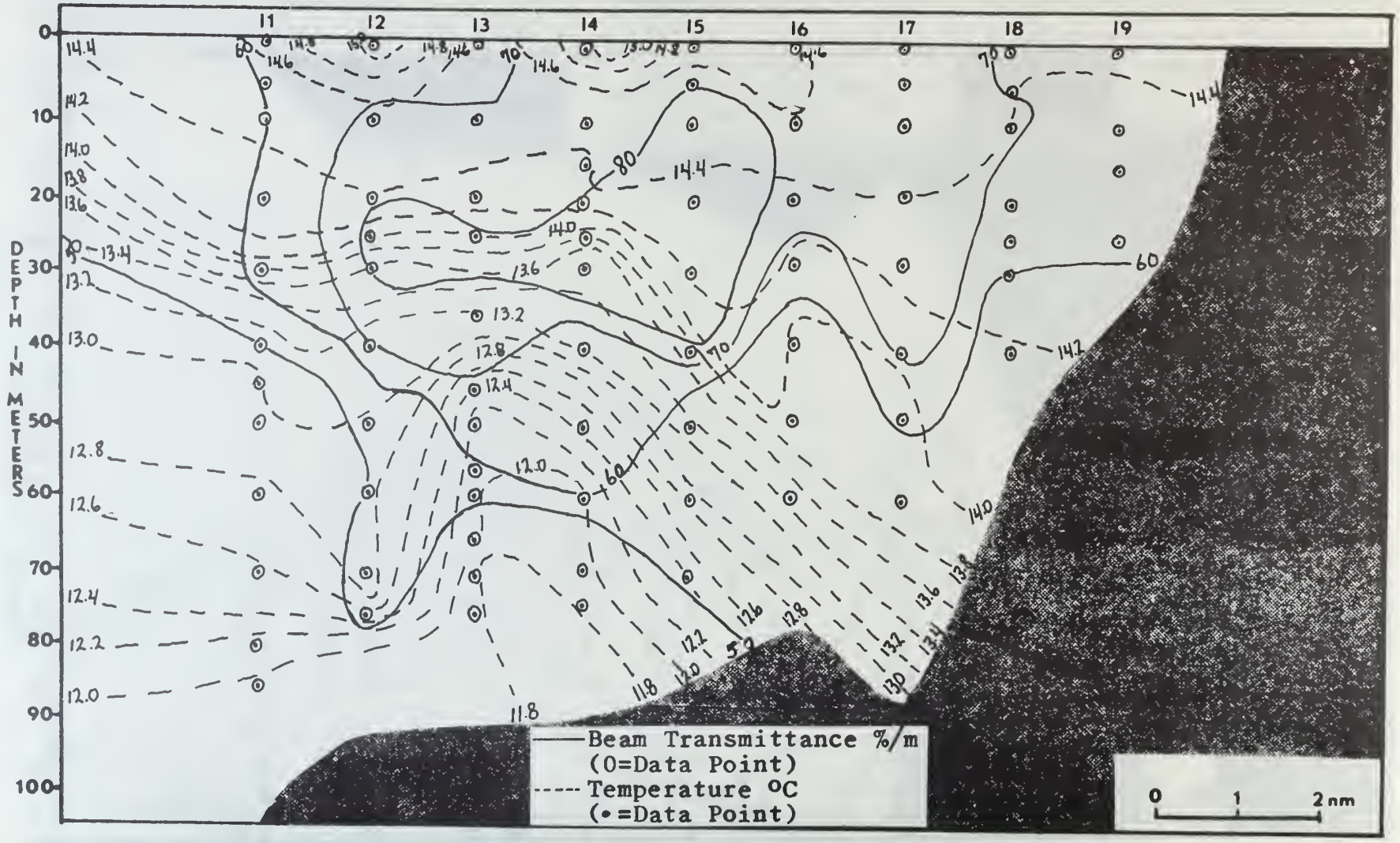

11
12
13
14
15
16
17
18
19
0
10
20
30
40
50
60
70
80
90
100
DEPTH - IN METERS
Beam Transmittance %/m
(0=Data Point)
Temperature °C
(•=Data Point)
0
1
2 nm

FIGURE 17

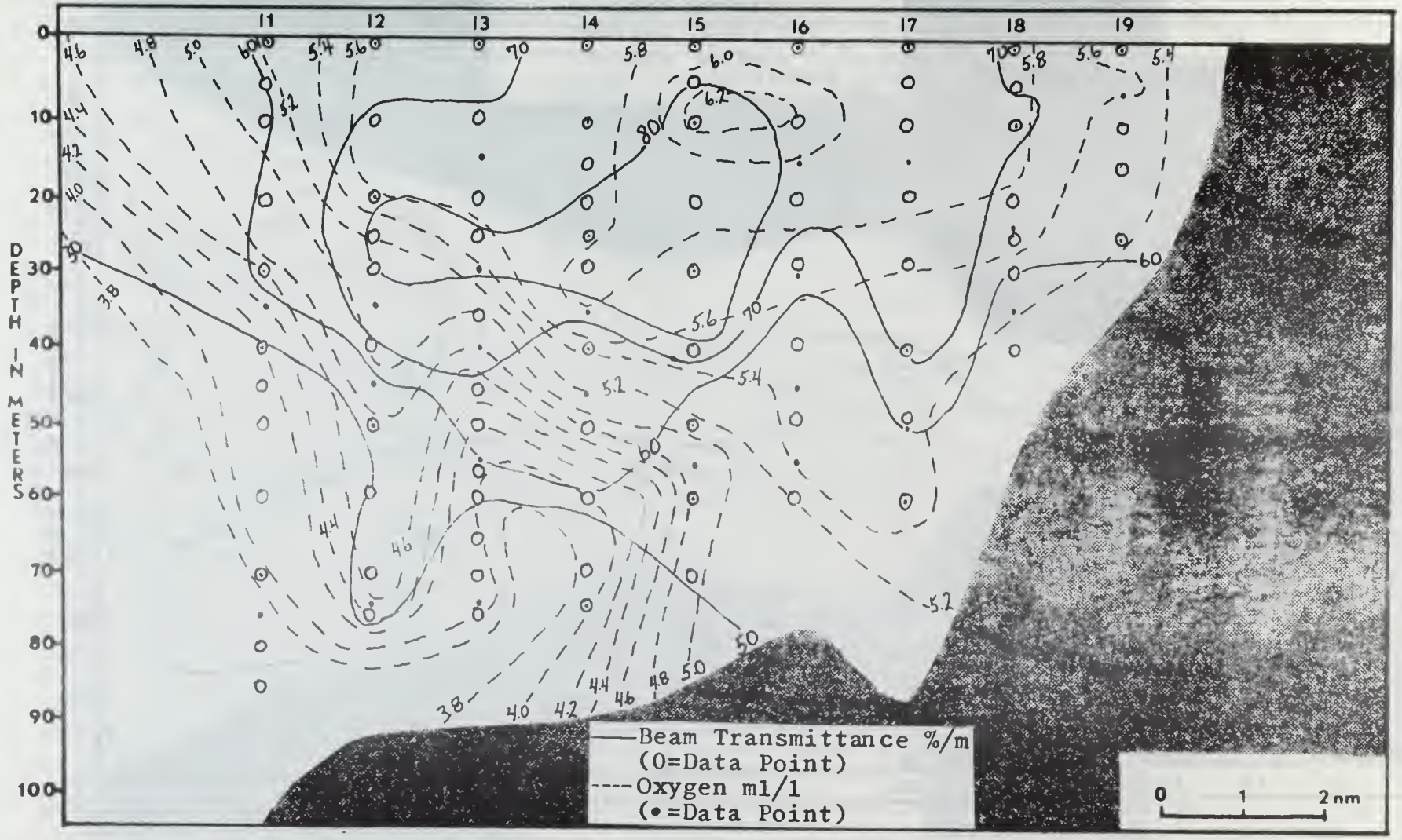

11
12
13
14
15
16
17
18
19
0
10
20
30
40
50
60
70
80
90
100
DEPTH IN METERS
Beam Transmittance %/m
(0=Data Point)
Oxygen ml/l
(•=Data Point)
0
1
2 nm

**FIGURE** 18

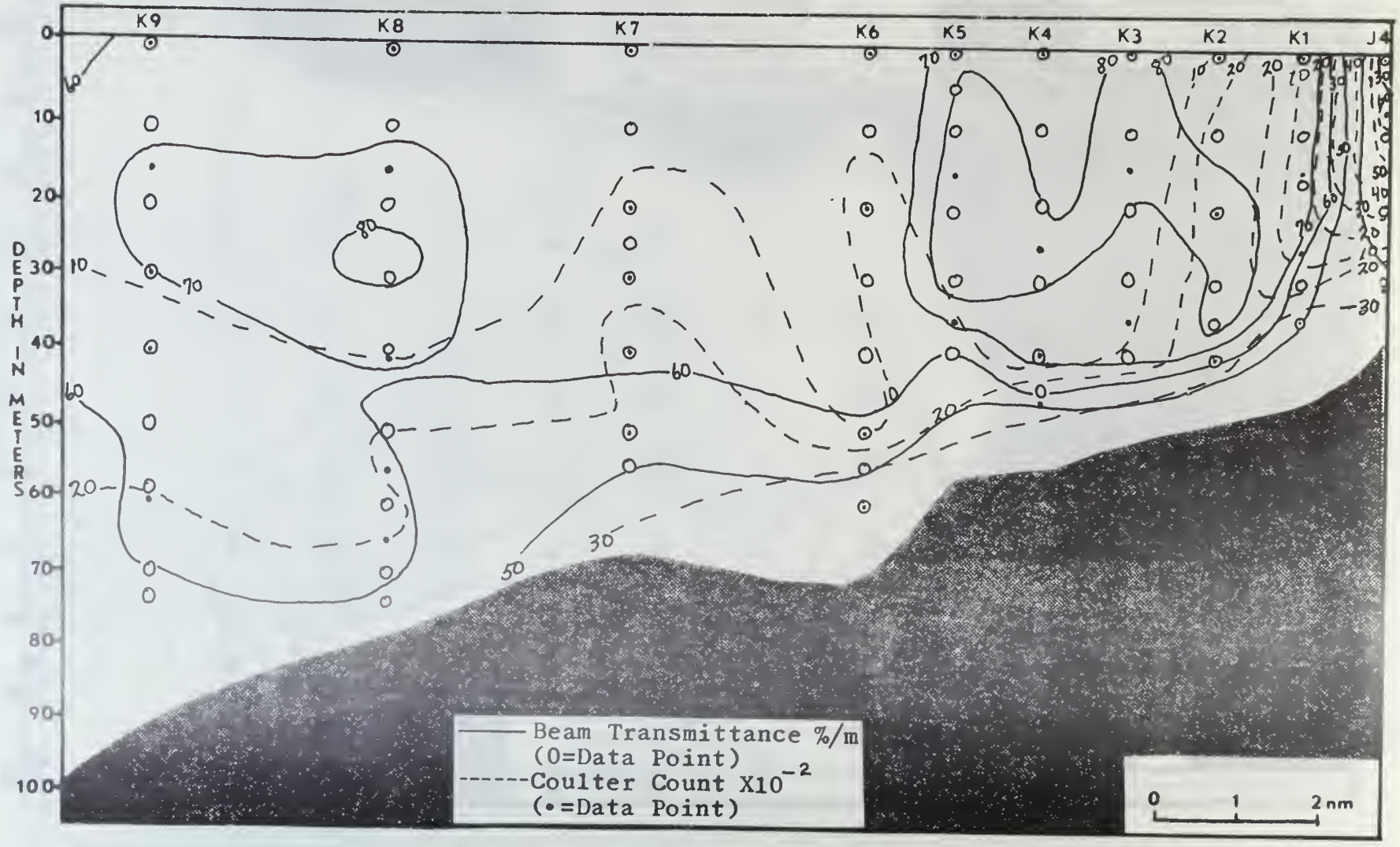

K9
K8
K7
K6
K5
K4
K3
K2
K1
J4
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Coulter Count X10$^{-2}$
(•=Data Point)
0
1
2 nm

FIGURE 19

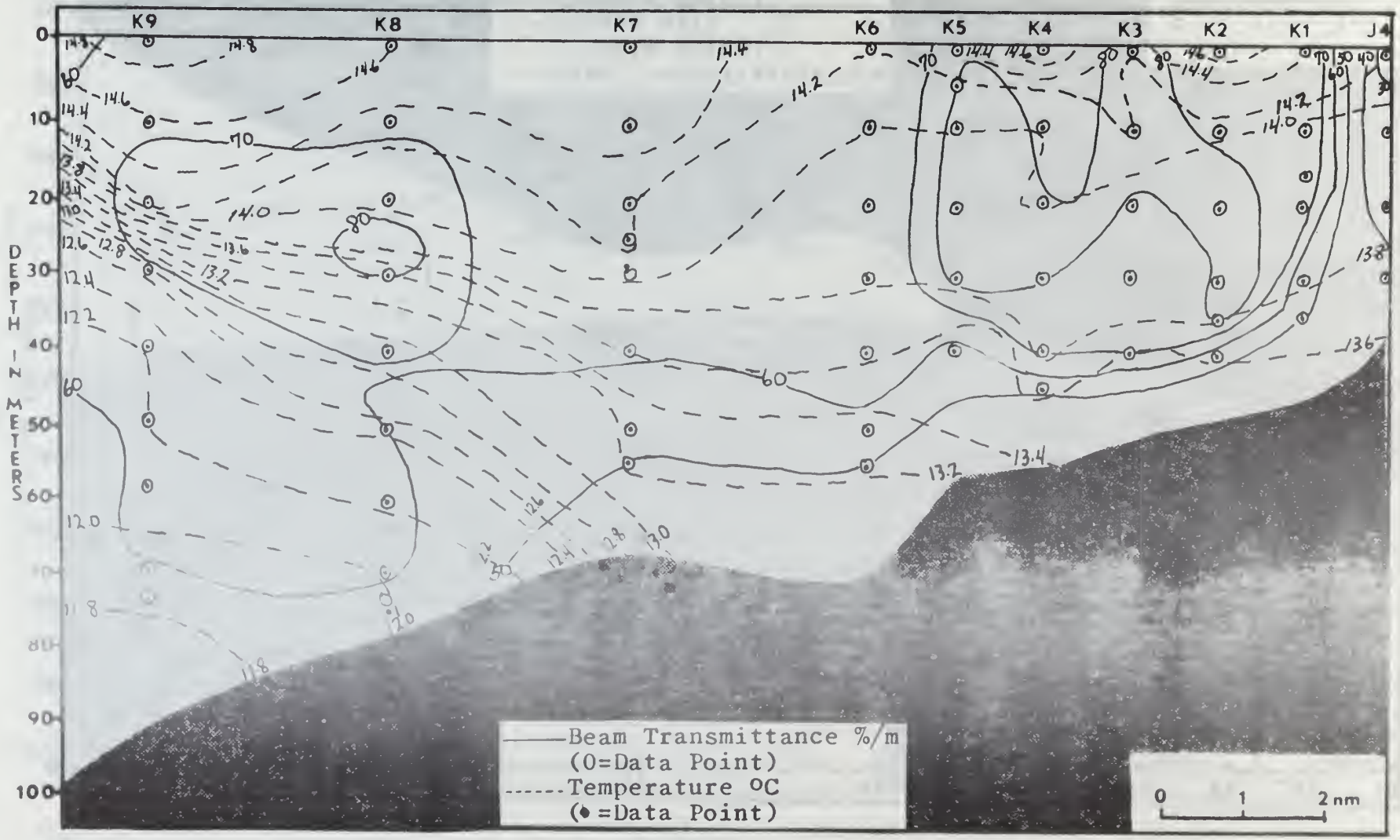

K9
K8
K7
K6
K5
K4
K3
K2
K1
J4
DEPTH - IN METERS
0
10
20
30
40
50
60
70
80
90
100
——Beam Transmittance %/m
(0=Data Point)
------Temperature °C
(♦=Data Point)
0
1
2 nm

**FIGURE** 20

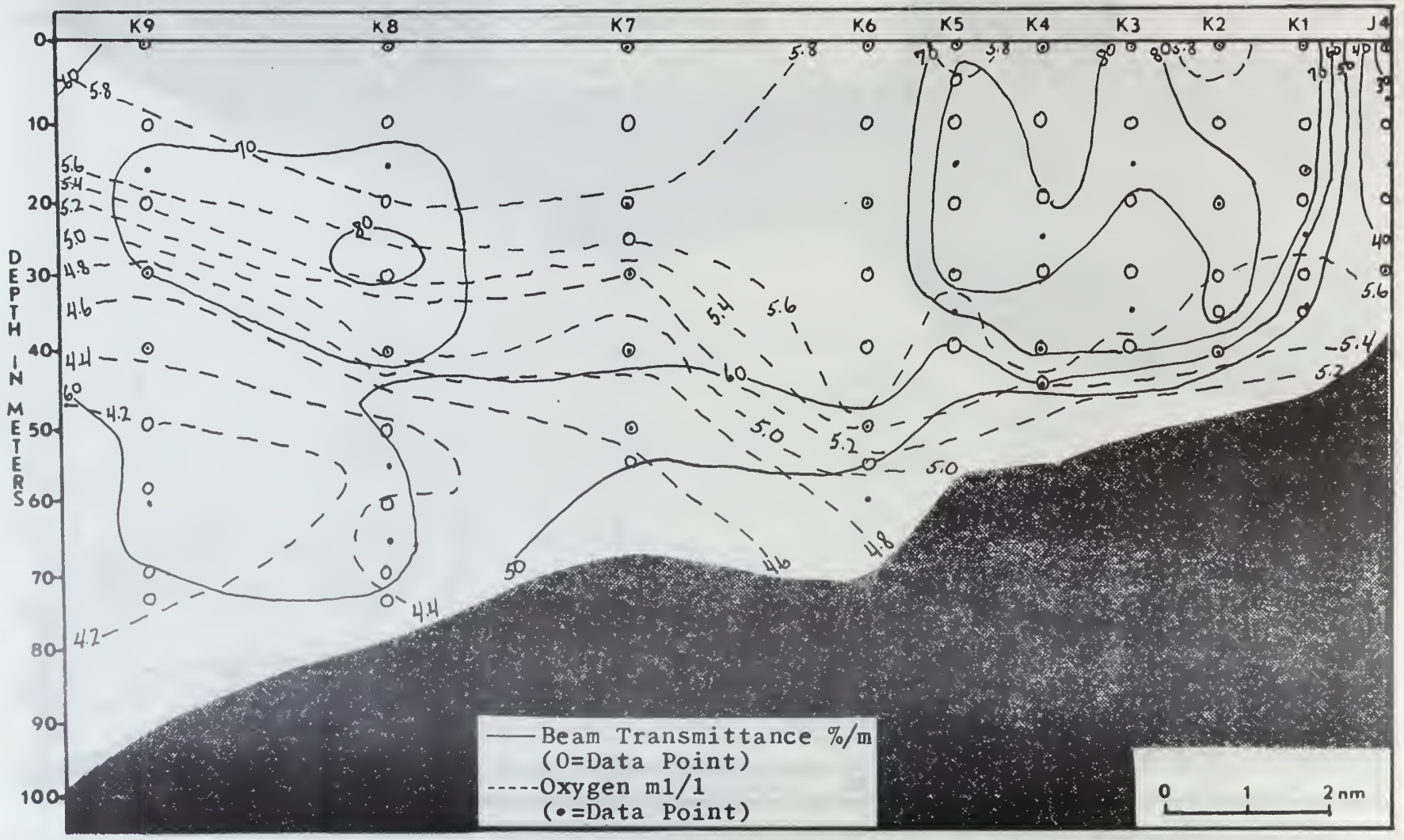

K9
K8
K7
K6
K5
K4
K3
K2
K1
J4
DEPTH -N METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Oxygen ml/l
(•=Data Point)
0
1
2 nm

FIGURE 21

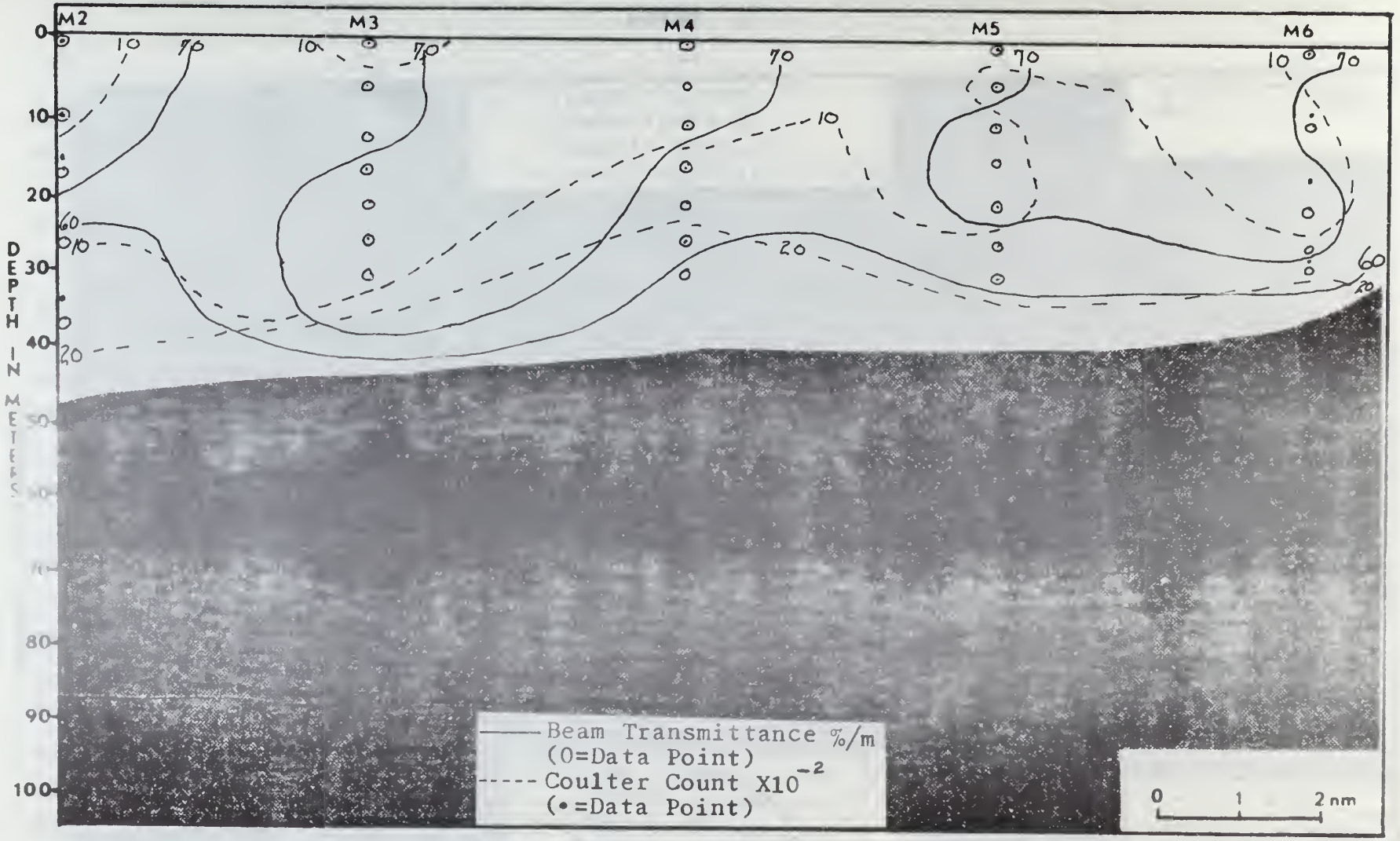

M2
M3
M4
M5
M6
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
Beam Transmittance %/m
(0=Data Point)
Coulter Count X10$^{-2}$
(•=Data Point)
0
1
2 nm

FIGURE 22

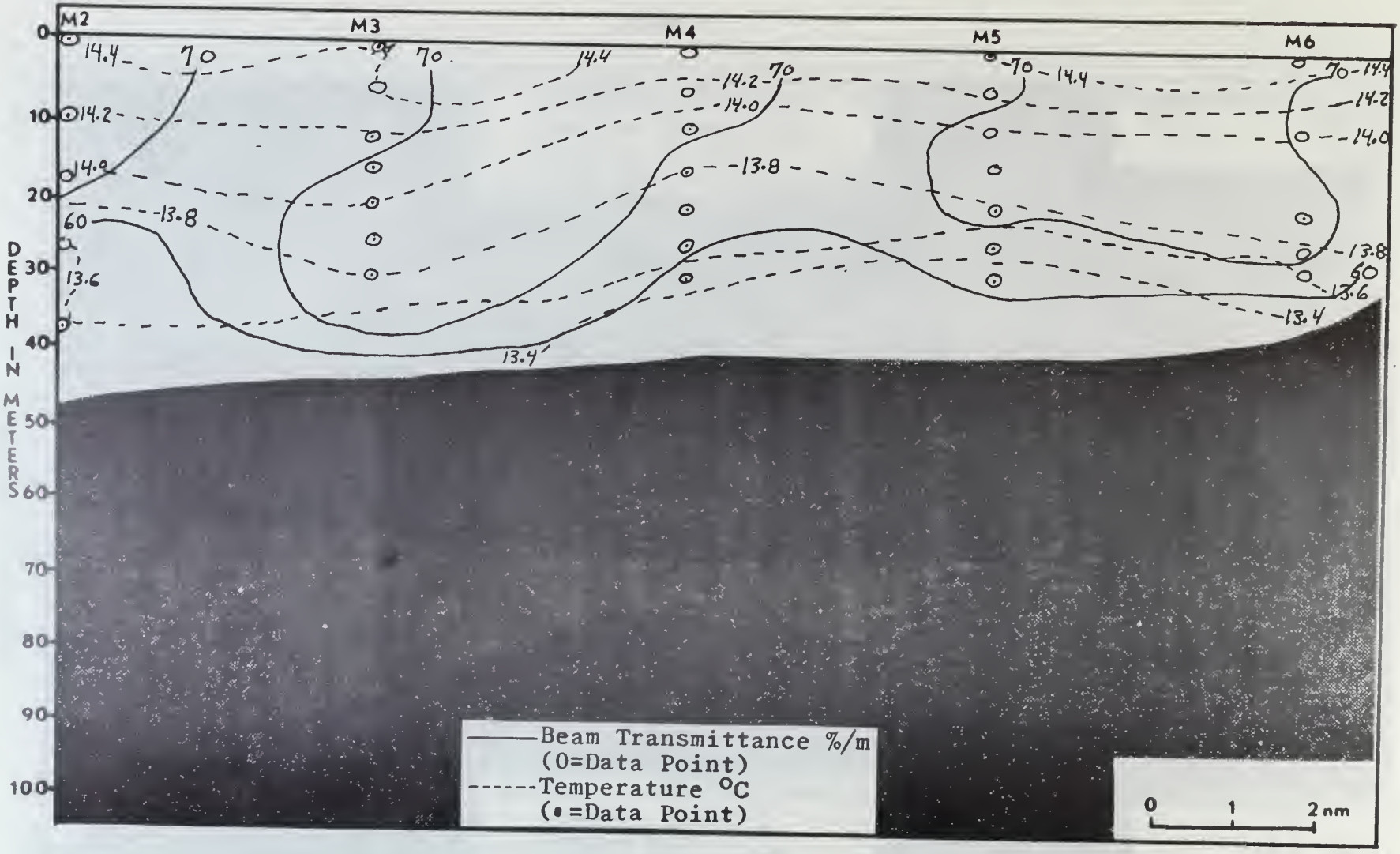

M2
M3
M4
M5
M6
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
14.4
14.2
14.0
13.8
13.6
13.4
70
60
——Beam Transmittance %/m
(0=Data Point)
-----Temperature °C
(•=Data Point)
0
1
2 nm

**FIGURE** 23

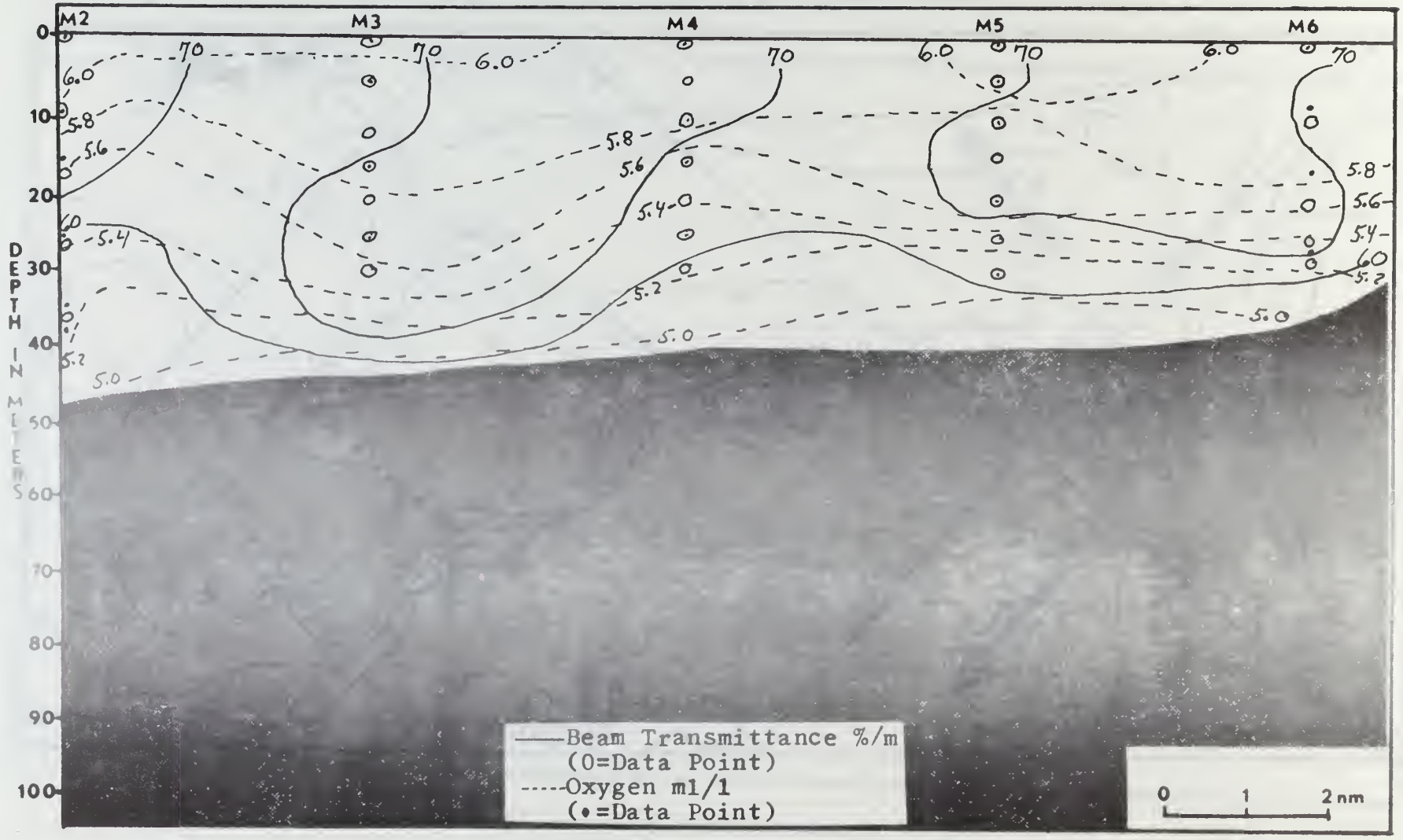
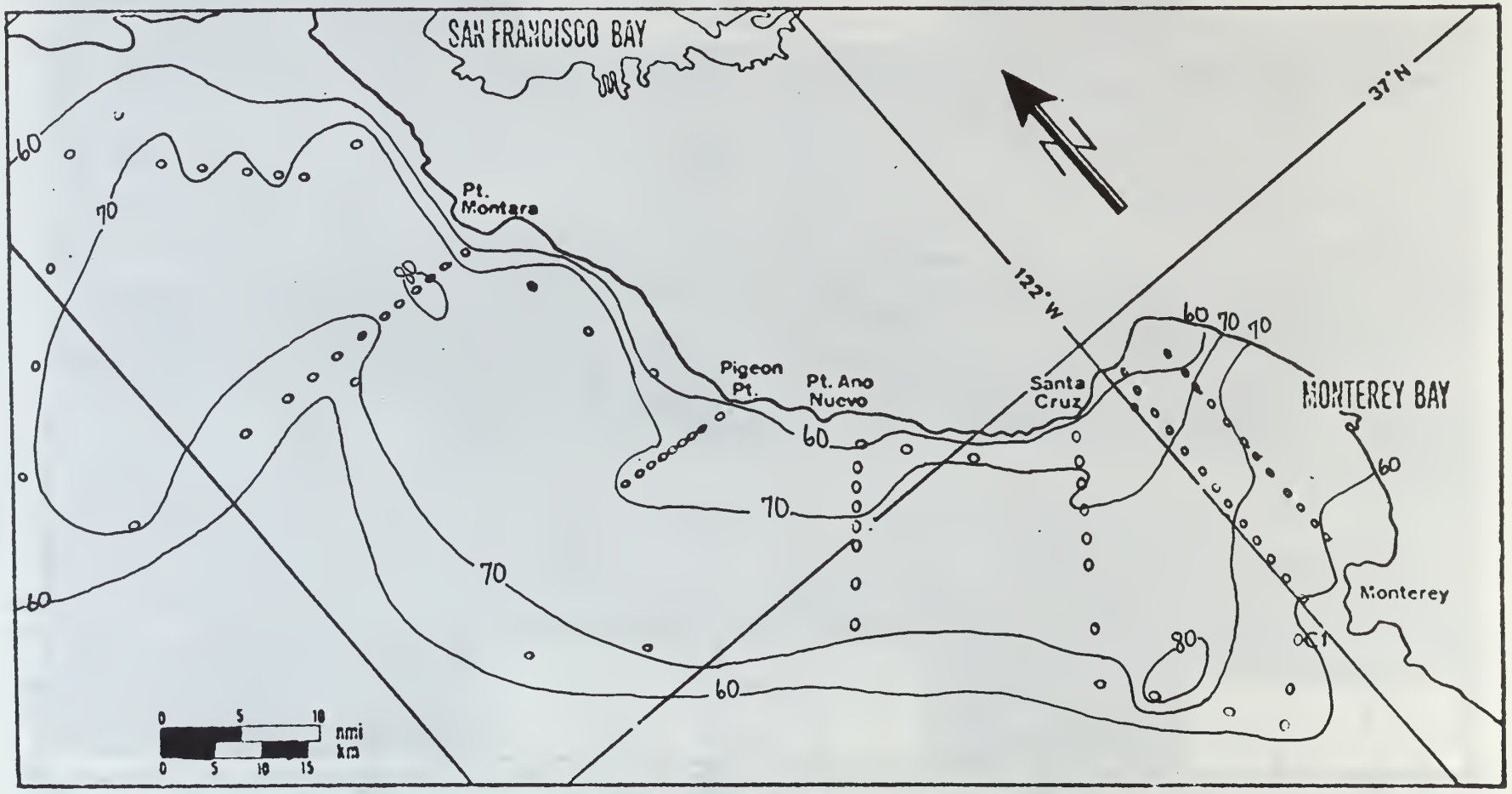
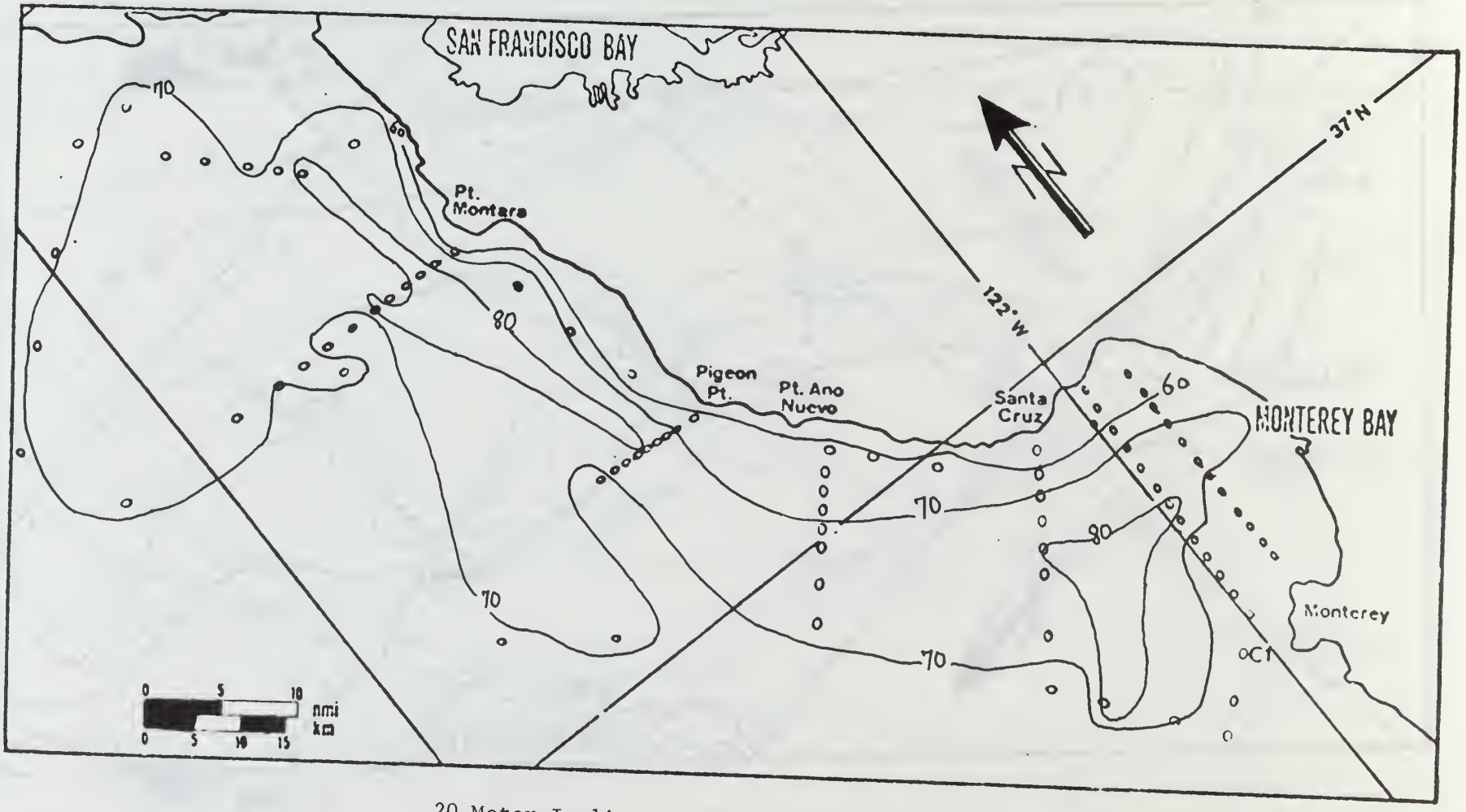

M2
M3
M4
M5
M6
DEPTH IN METERS
0
10
20
30
40
50
60
70
80
90
100
——Beam Transmittance %/m
(0=Data Point)
-----Oxygen ml/1
(•=Data Point)
0
1
2 nm

**FIGURE** 24



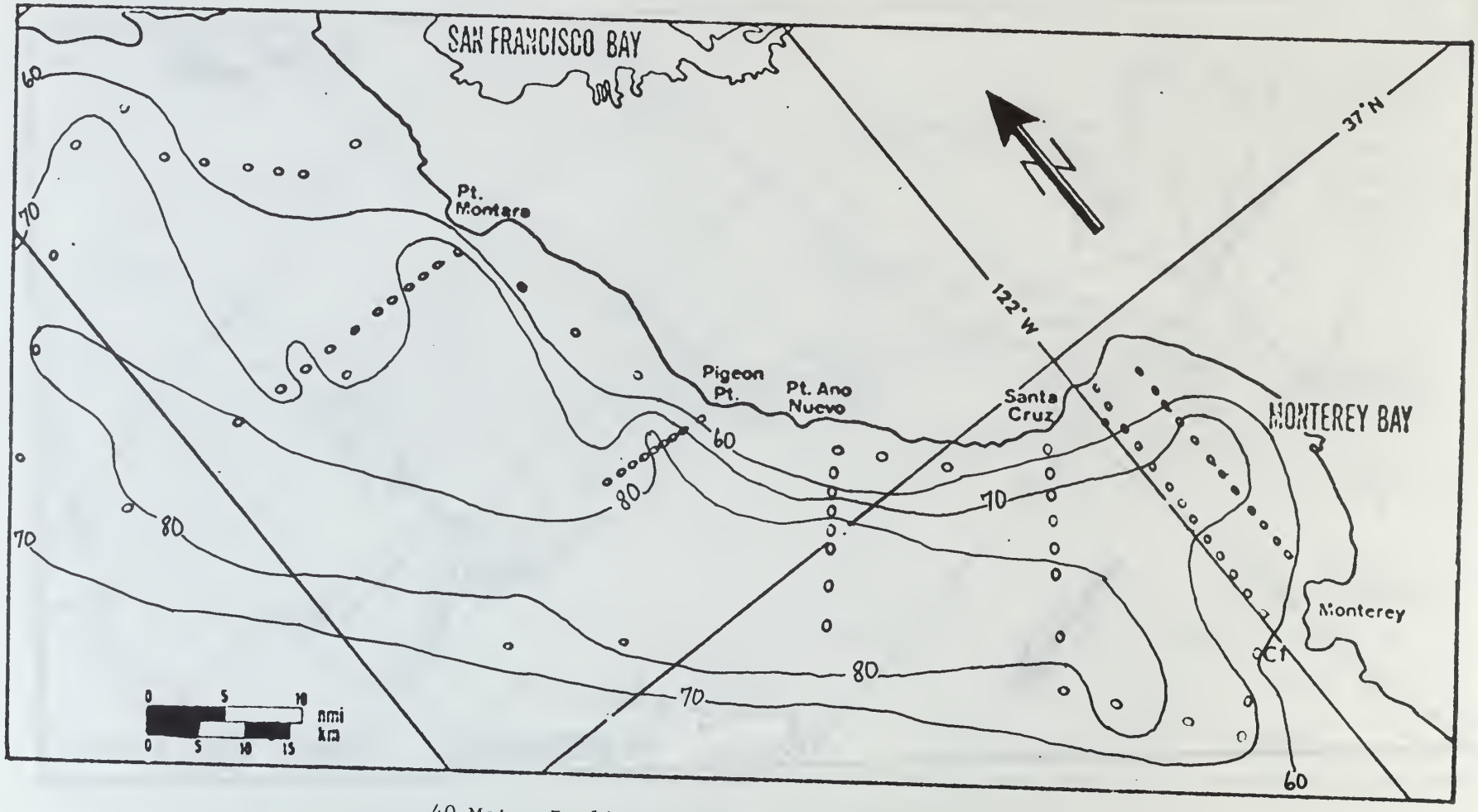

0 Meter Isolines of Beam Transmittance (%/m)

Figure 25



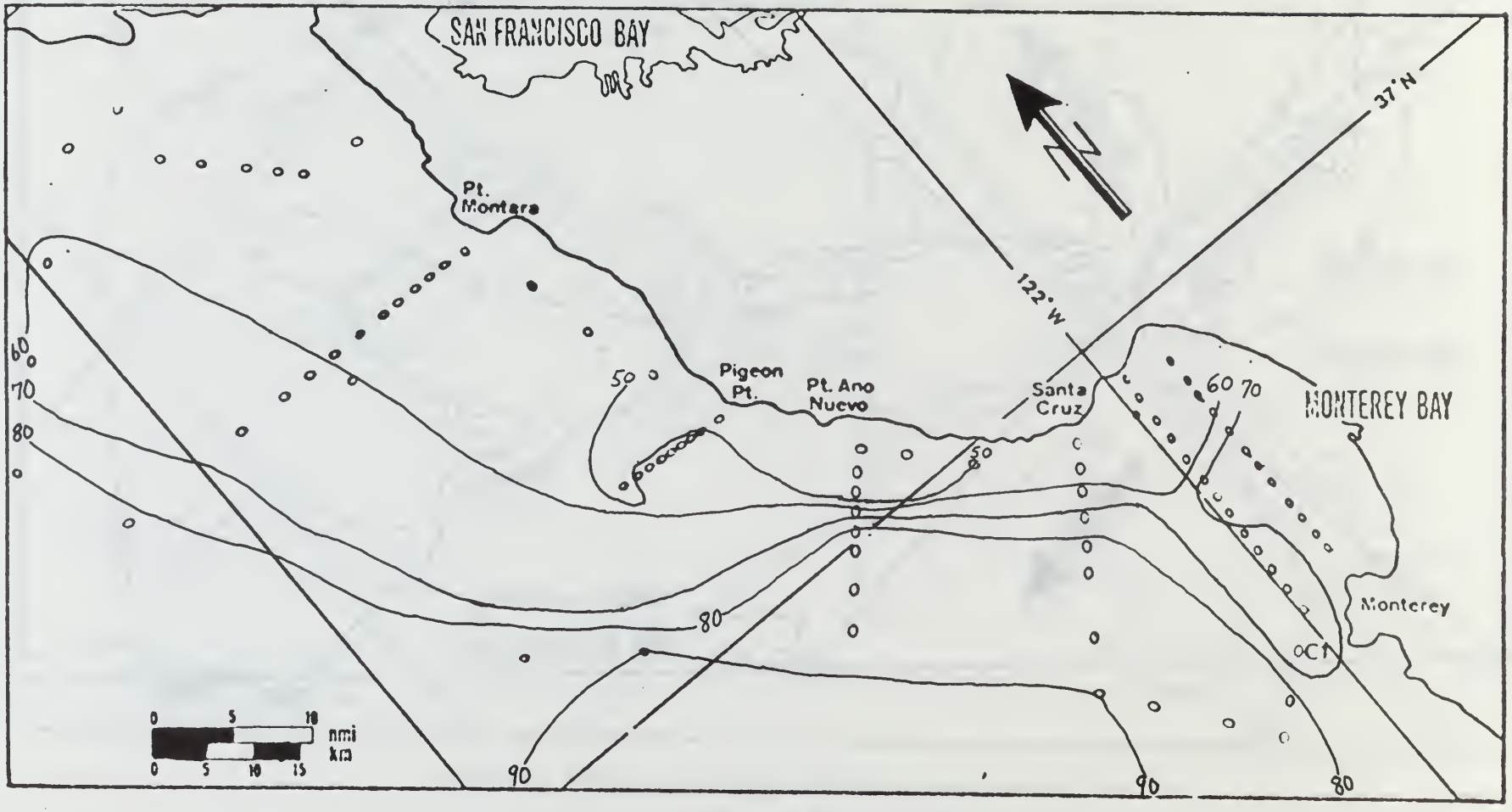

20 Meter Isoline of Beam Transmittance (%/m)

Figure 26



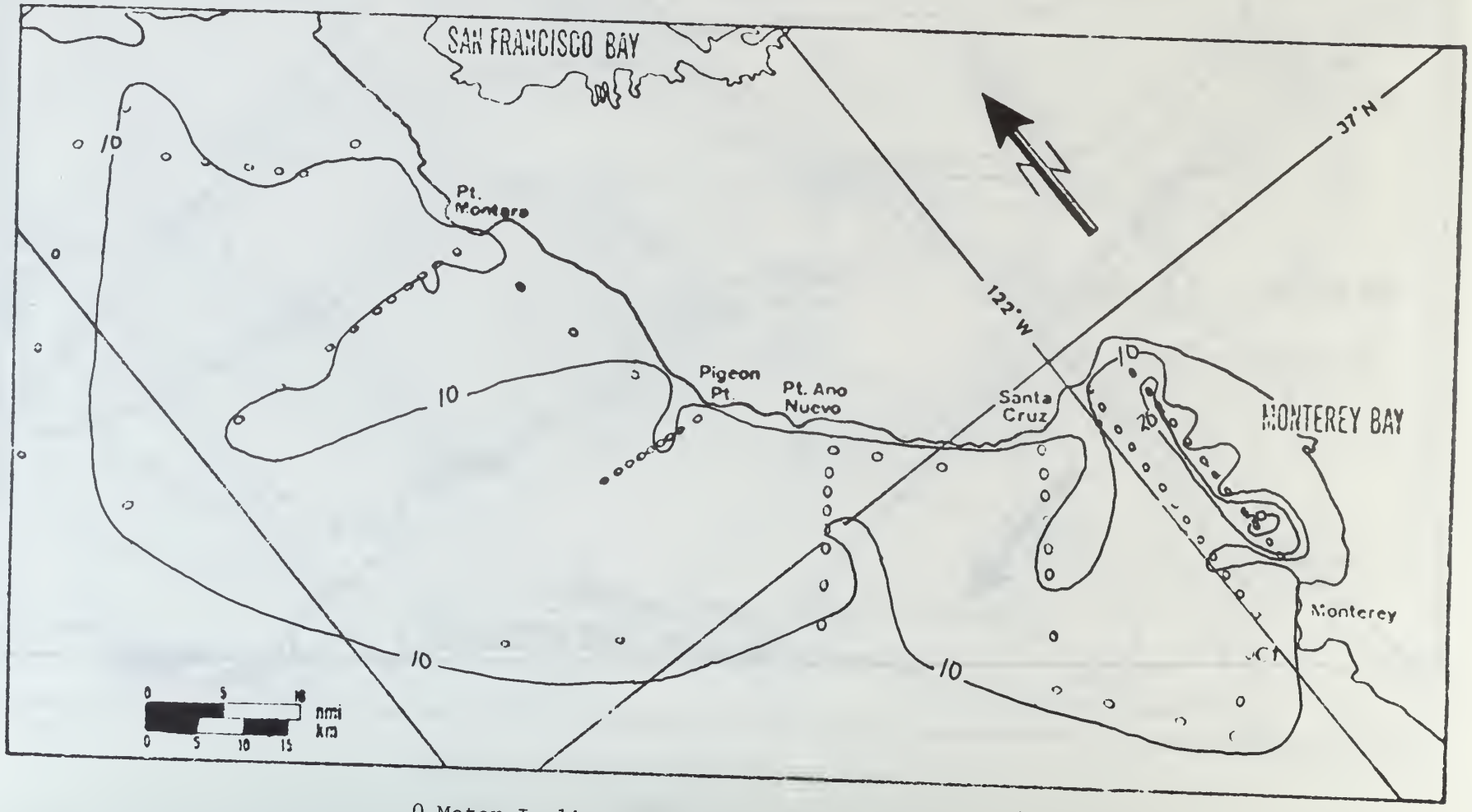

40 Meter Isolines of Beam Transmittance (%/m)

Figure 27



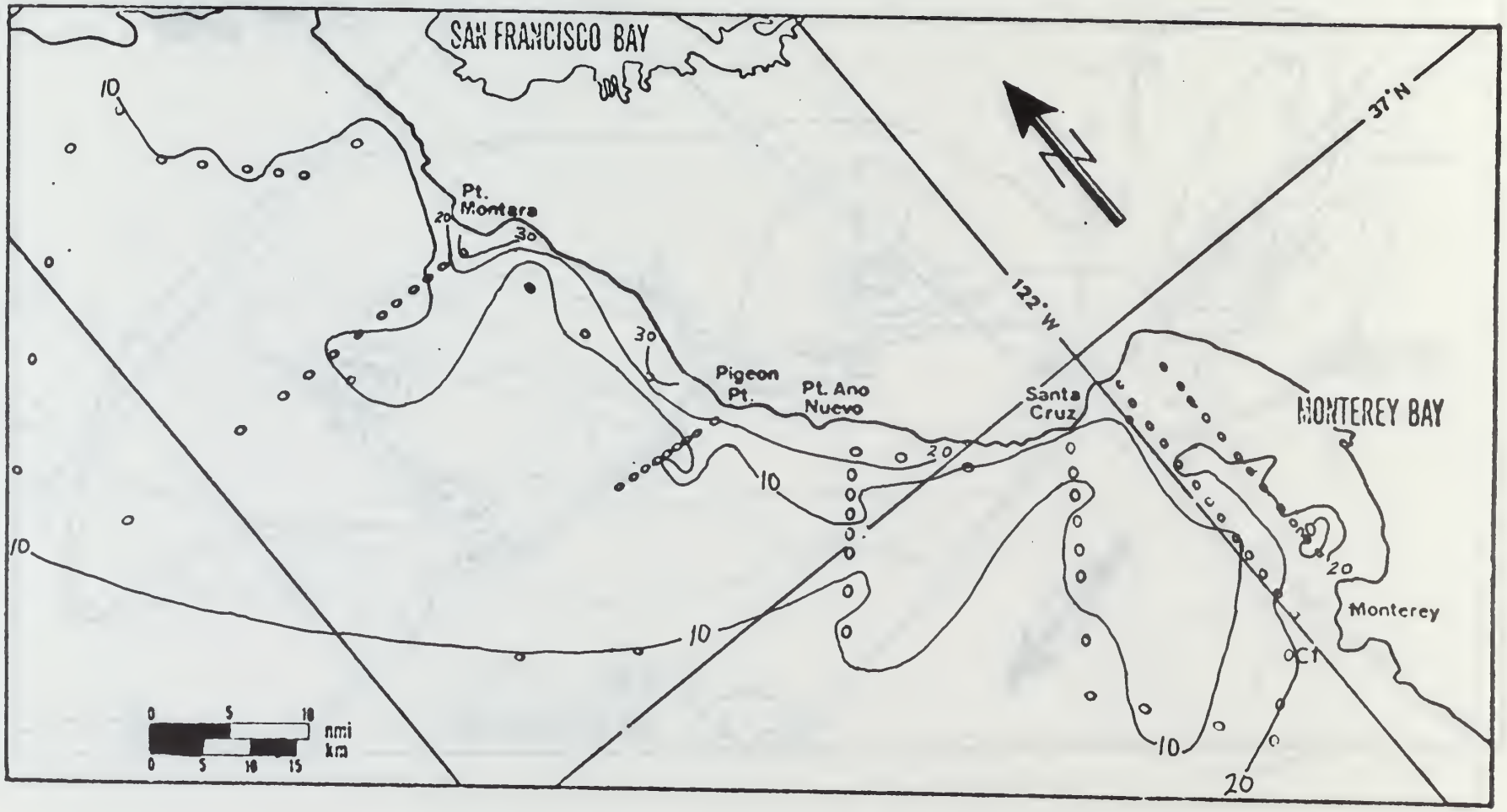

61 Meter Isolines of Beam Transmittance (%/m)

Figure 28



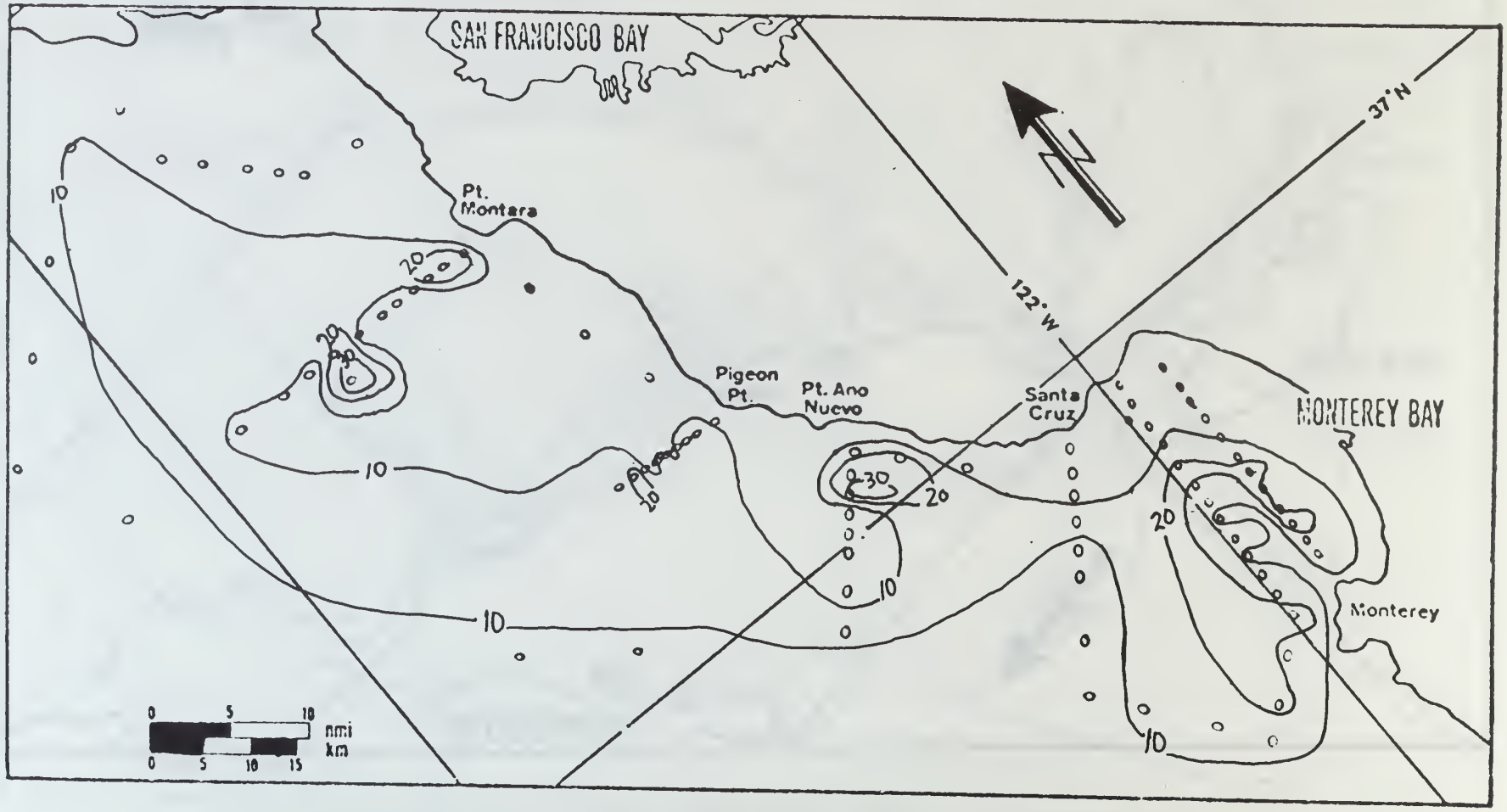

0 Meter Isolines of Total Coulter Count (x $10^{-2}$)

Figure 29



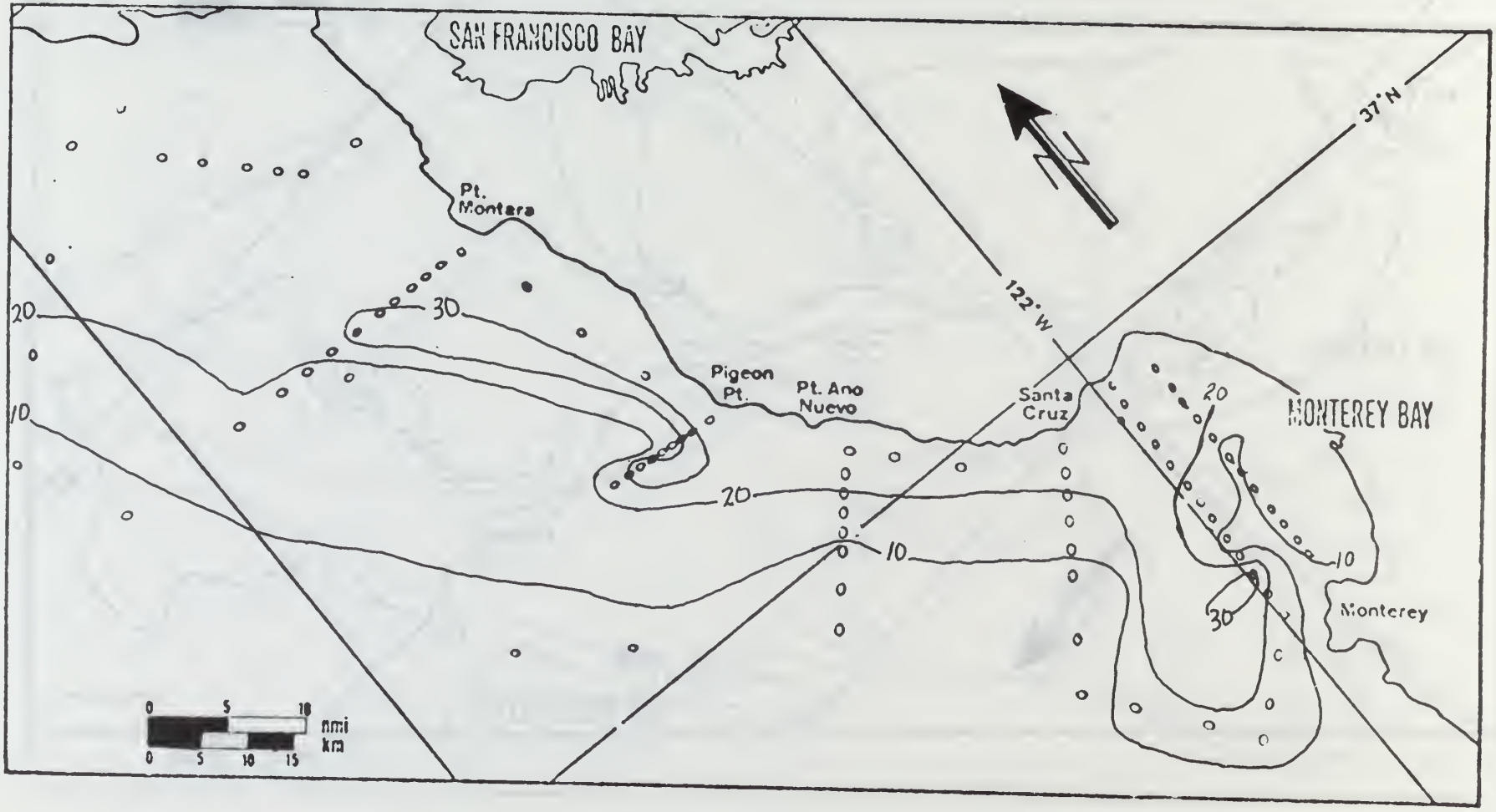

20 Meter Isolines of Total Coulter Count (x $10^{-2}$)

Figure 30



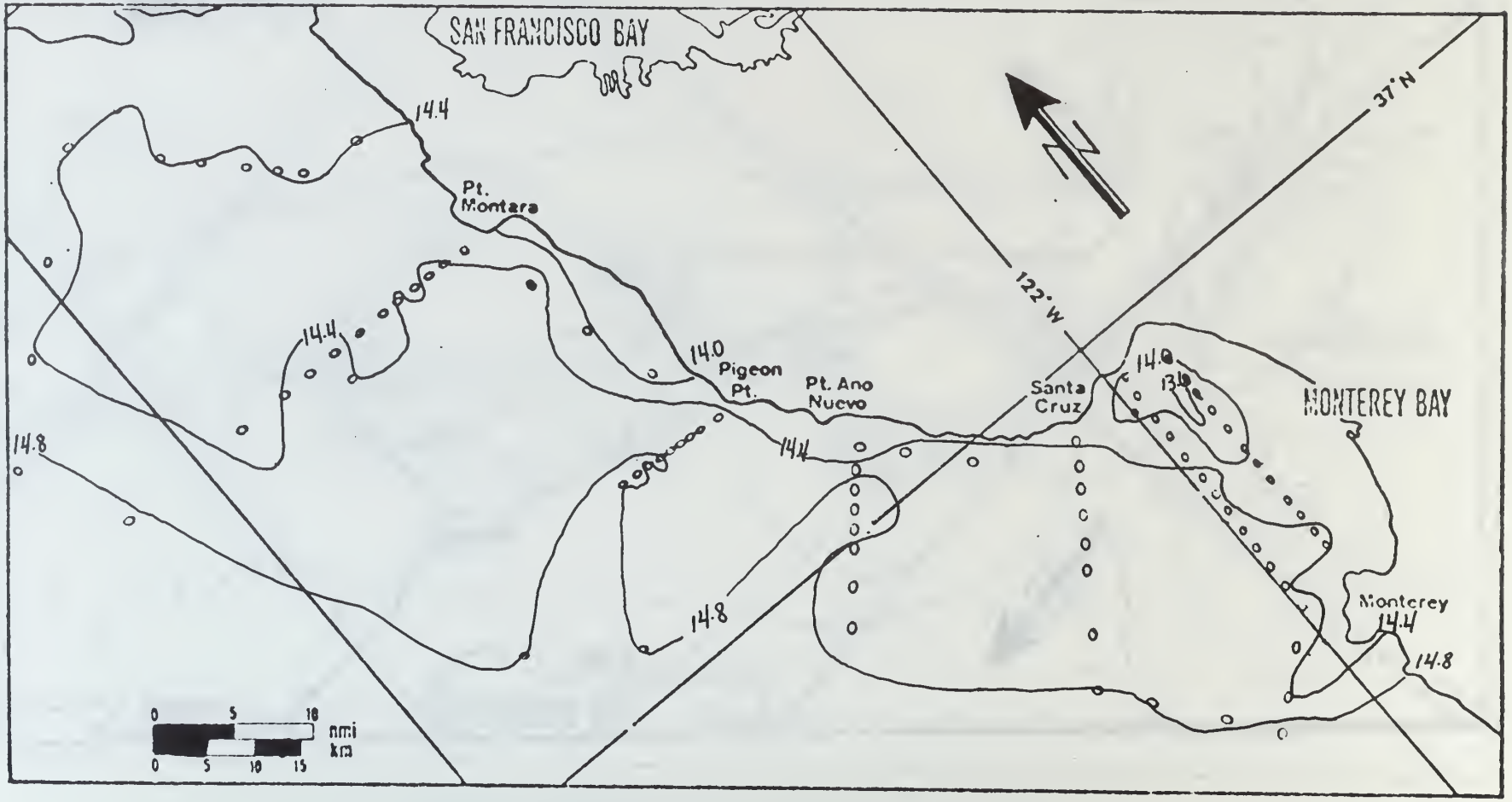

40 Meter Isolines of Total Coulter Count (x $10^{-2}$)

Figure 31



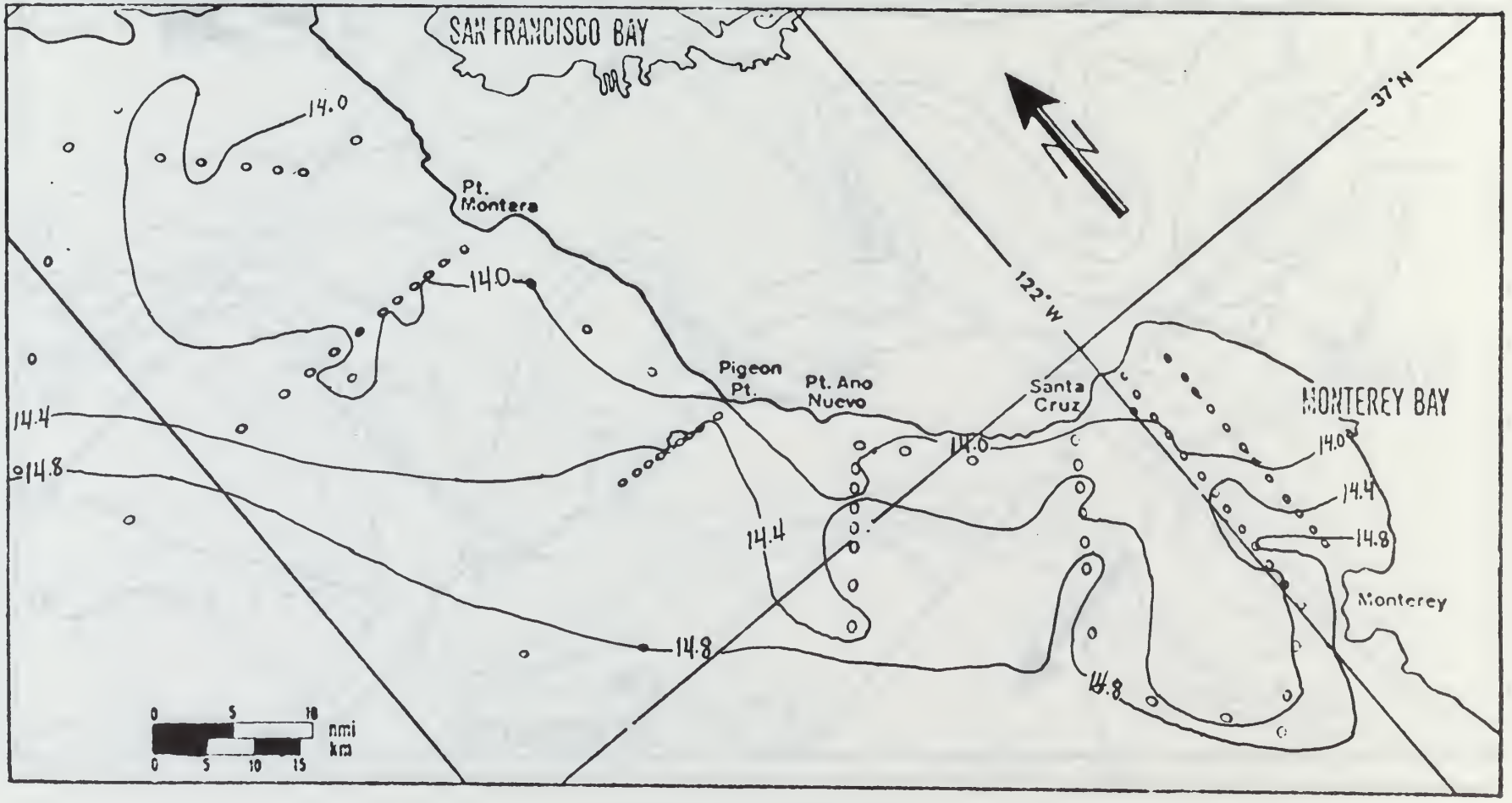

61 Meter Isolines of Total Coulter Count (x $10^{-2}$)

Figure 32



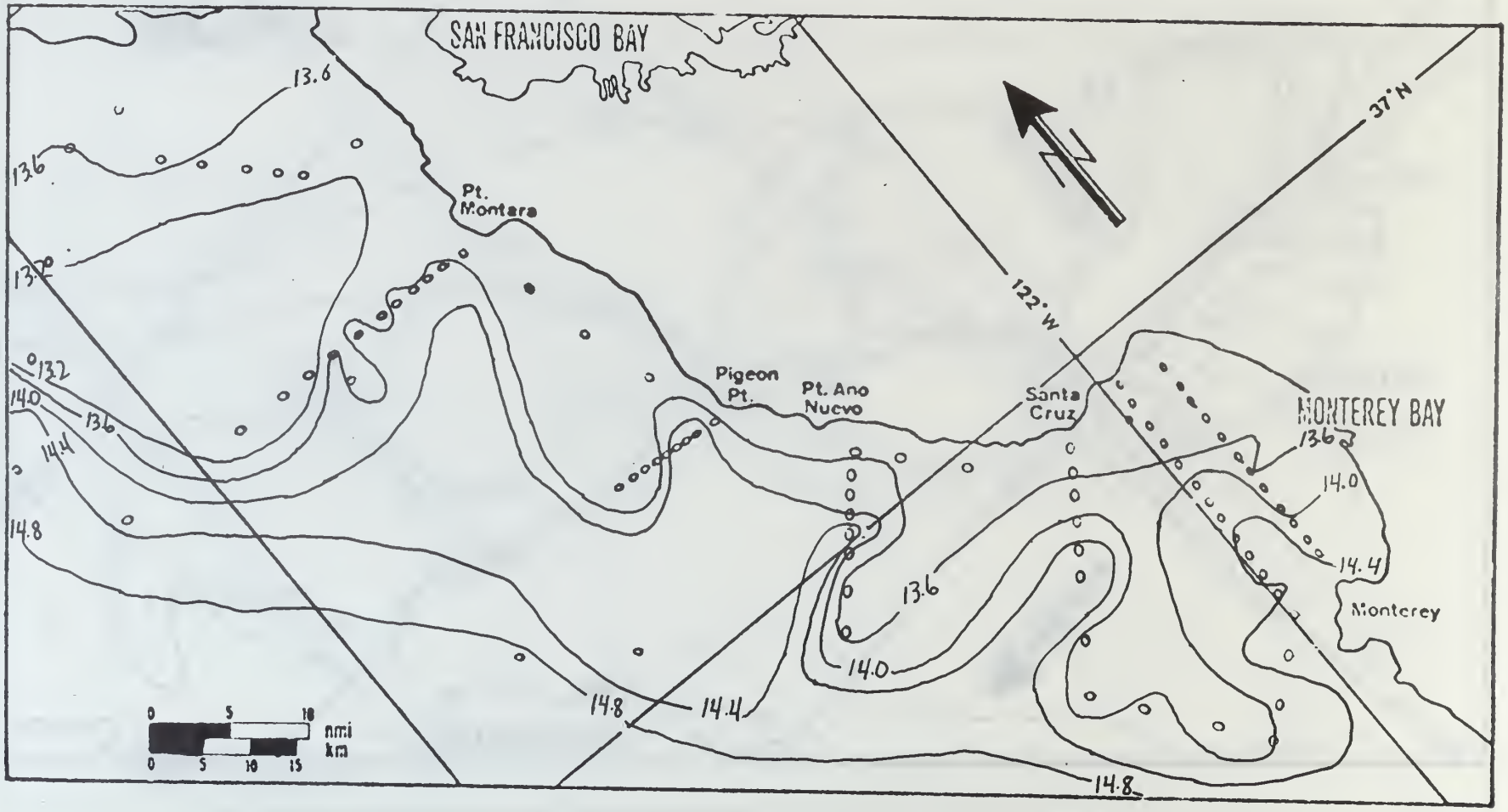

0 Meter Isotherms ($^{o}$C)

Figure 33



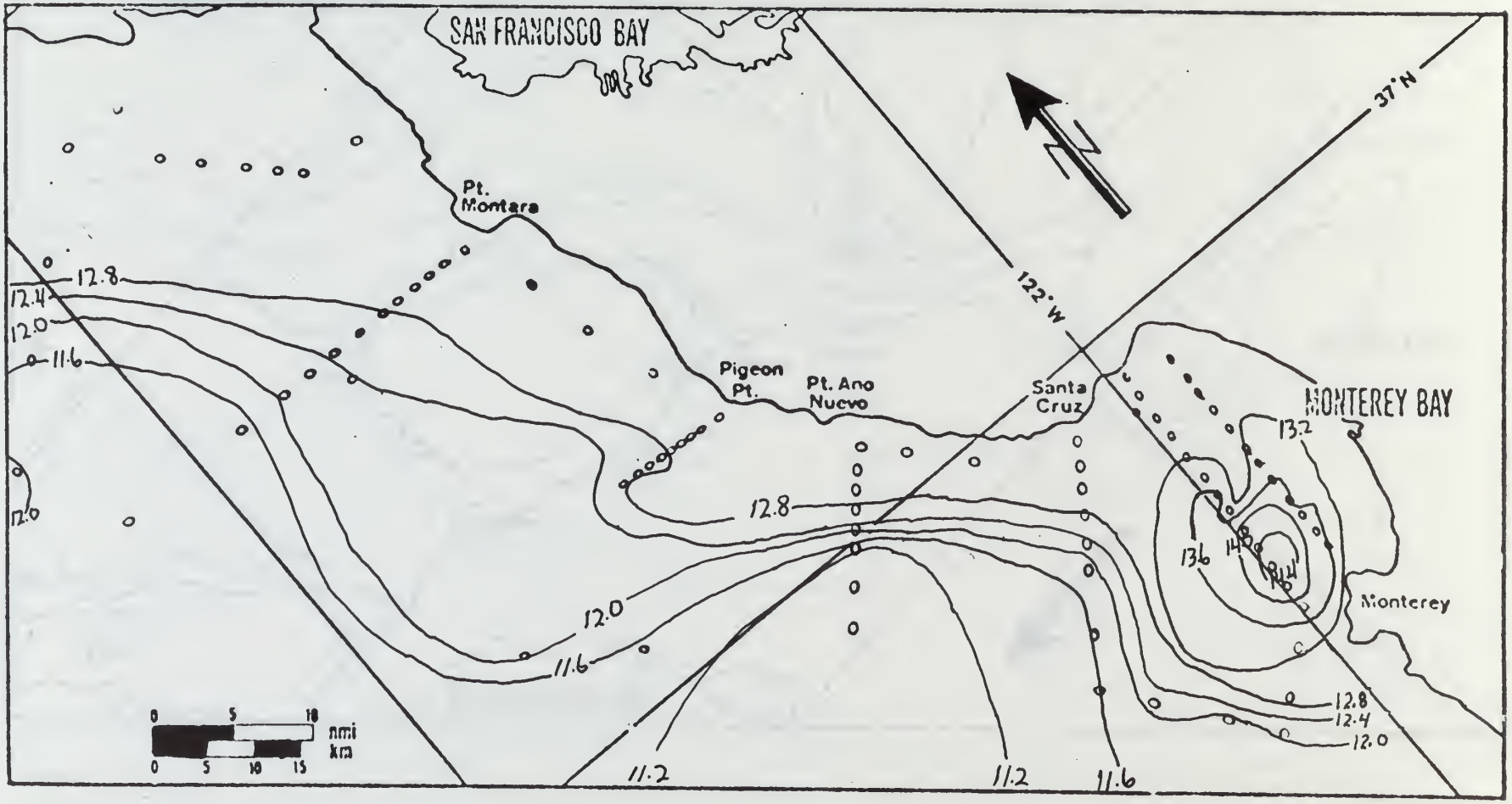

20 Meter Isotherms ($^{o}C$)

Figure 34



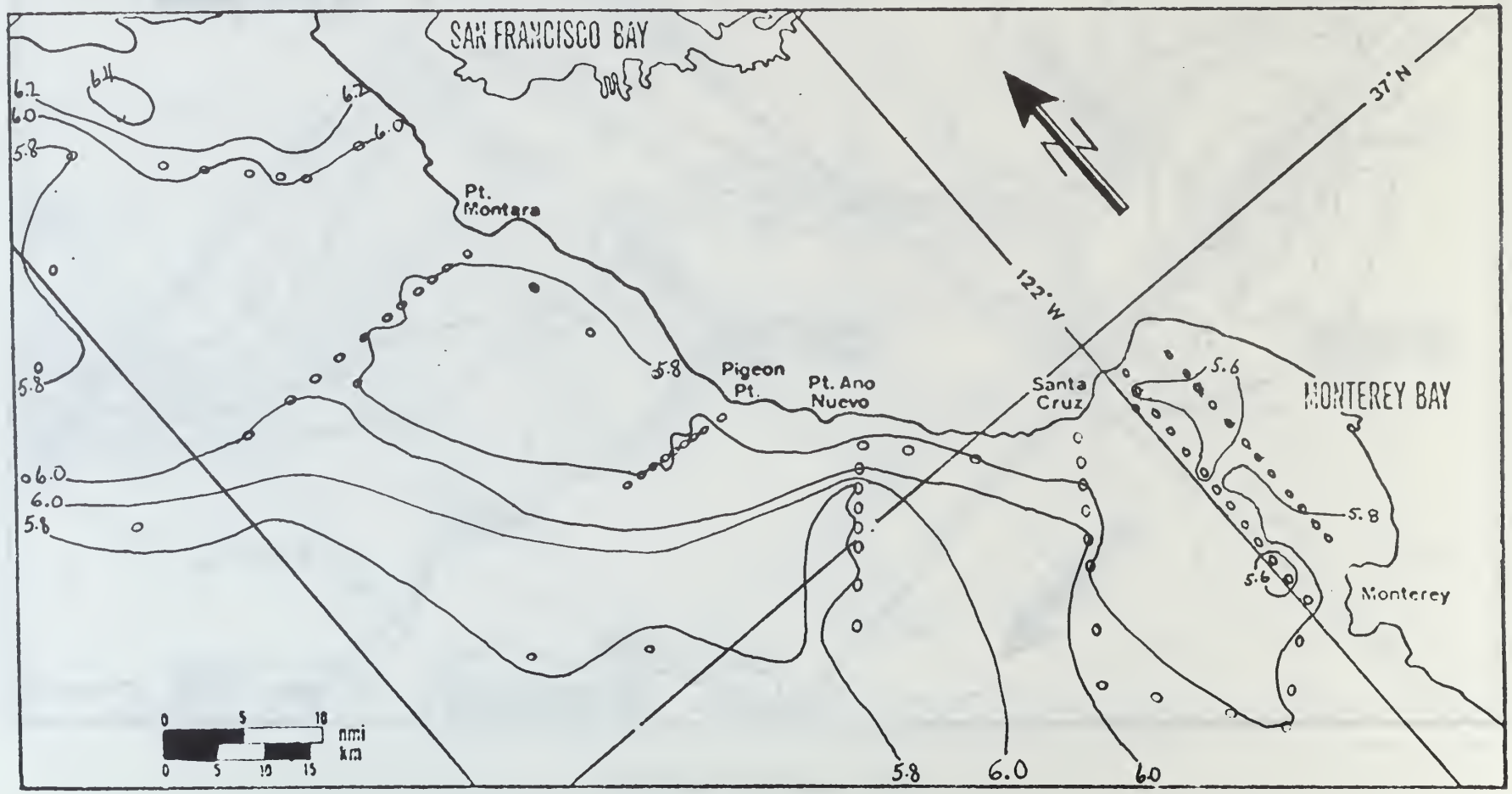

40 Meter Isotherms ($^{o}$C)

Figure 35



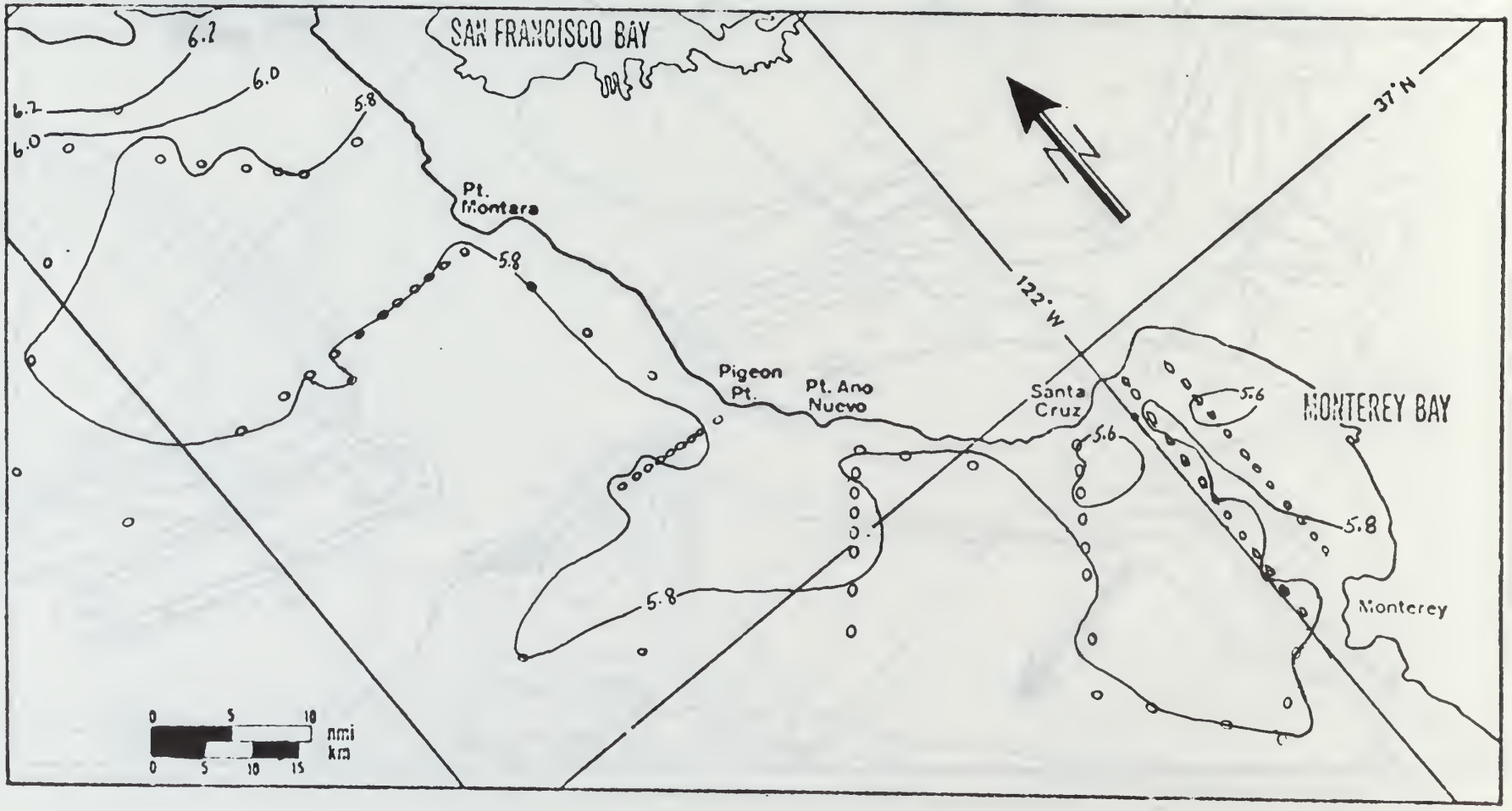

61 Meter Isotherms ($^{o}C$)

Figure 36



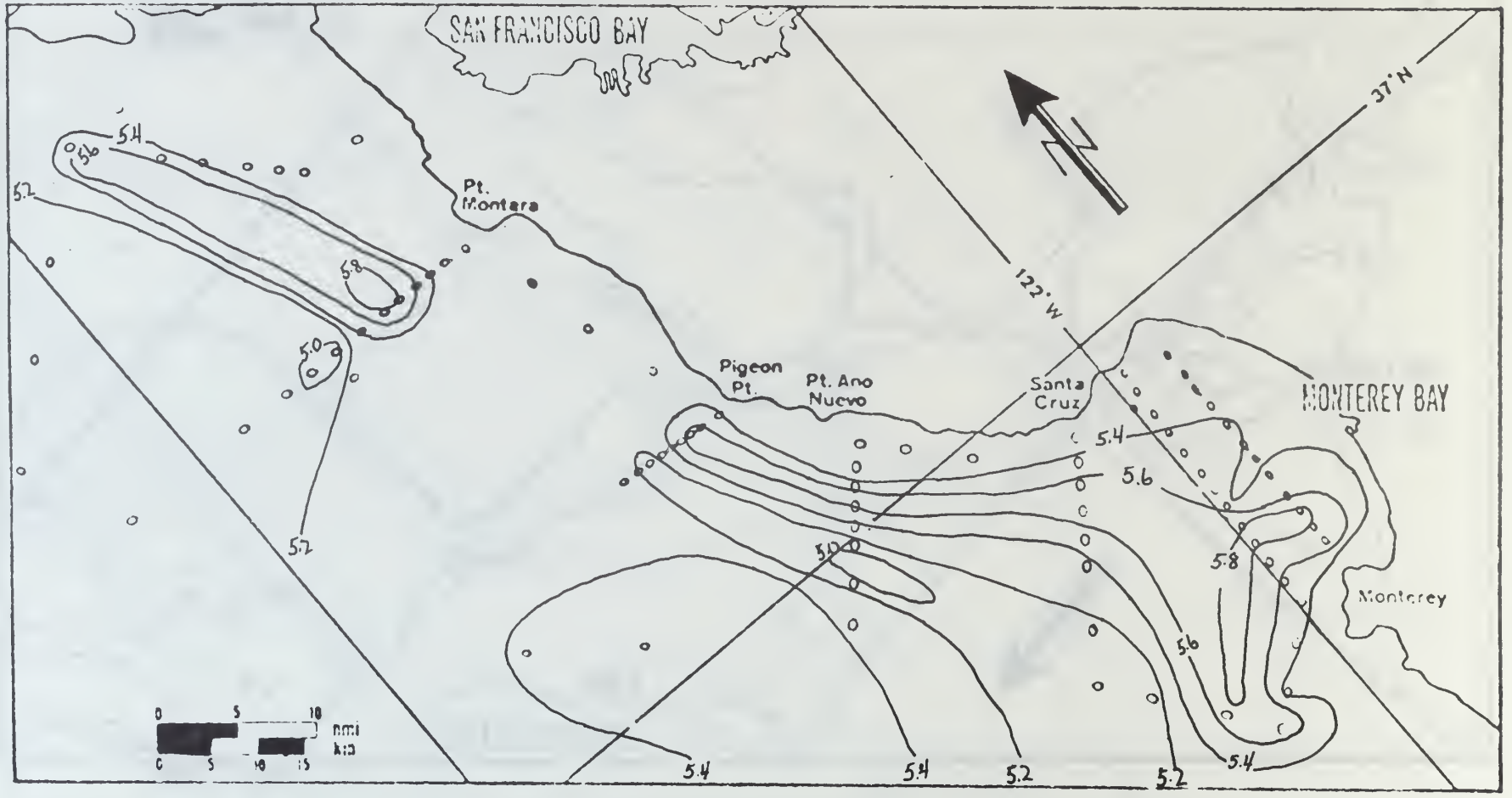

0 Meter Isolines of Oxygen Content (ml/l)

Figure 37



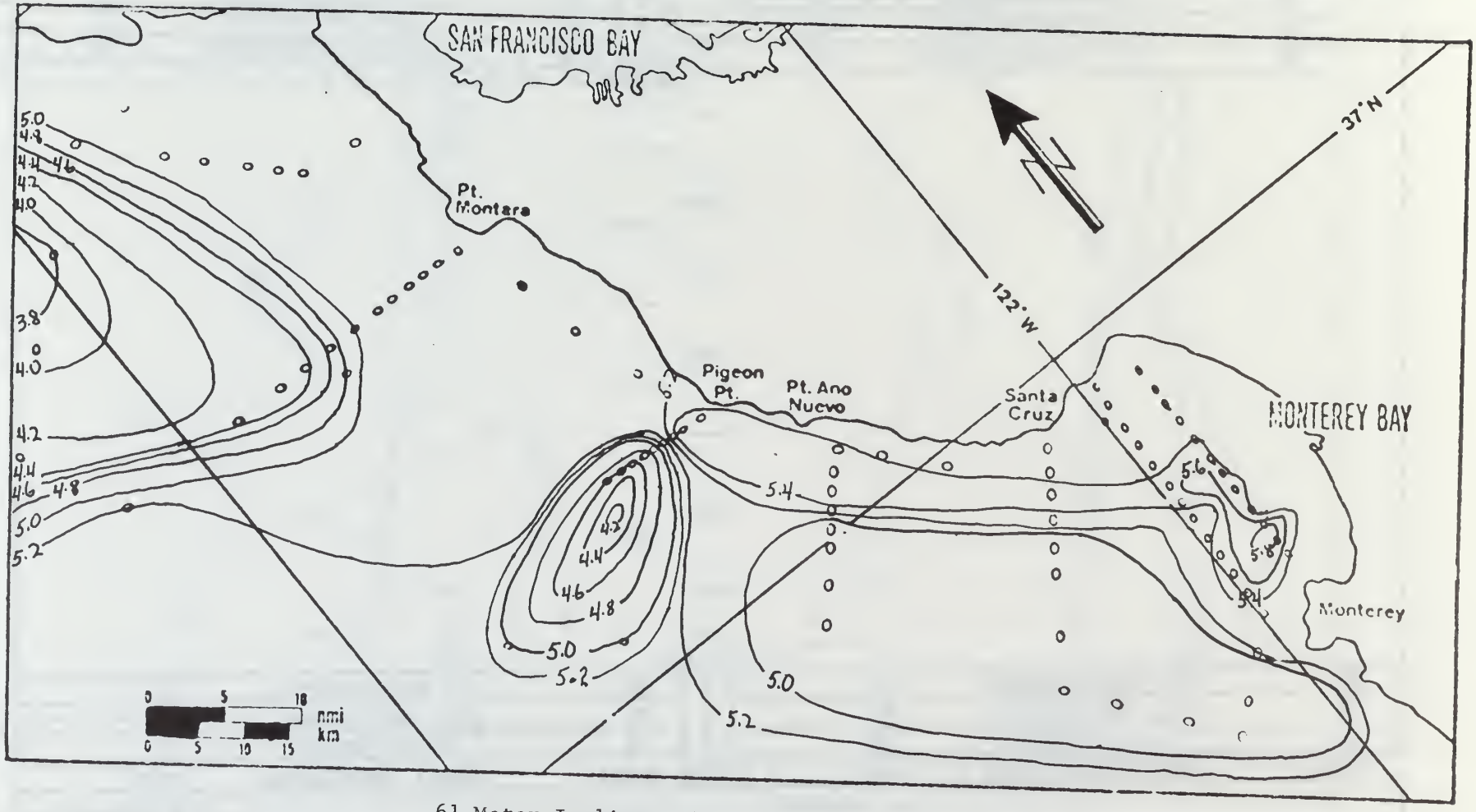

20 Meter Isolines of Oxygen Content (ml/l)

Figure 38



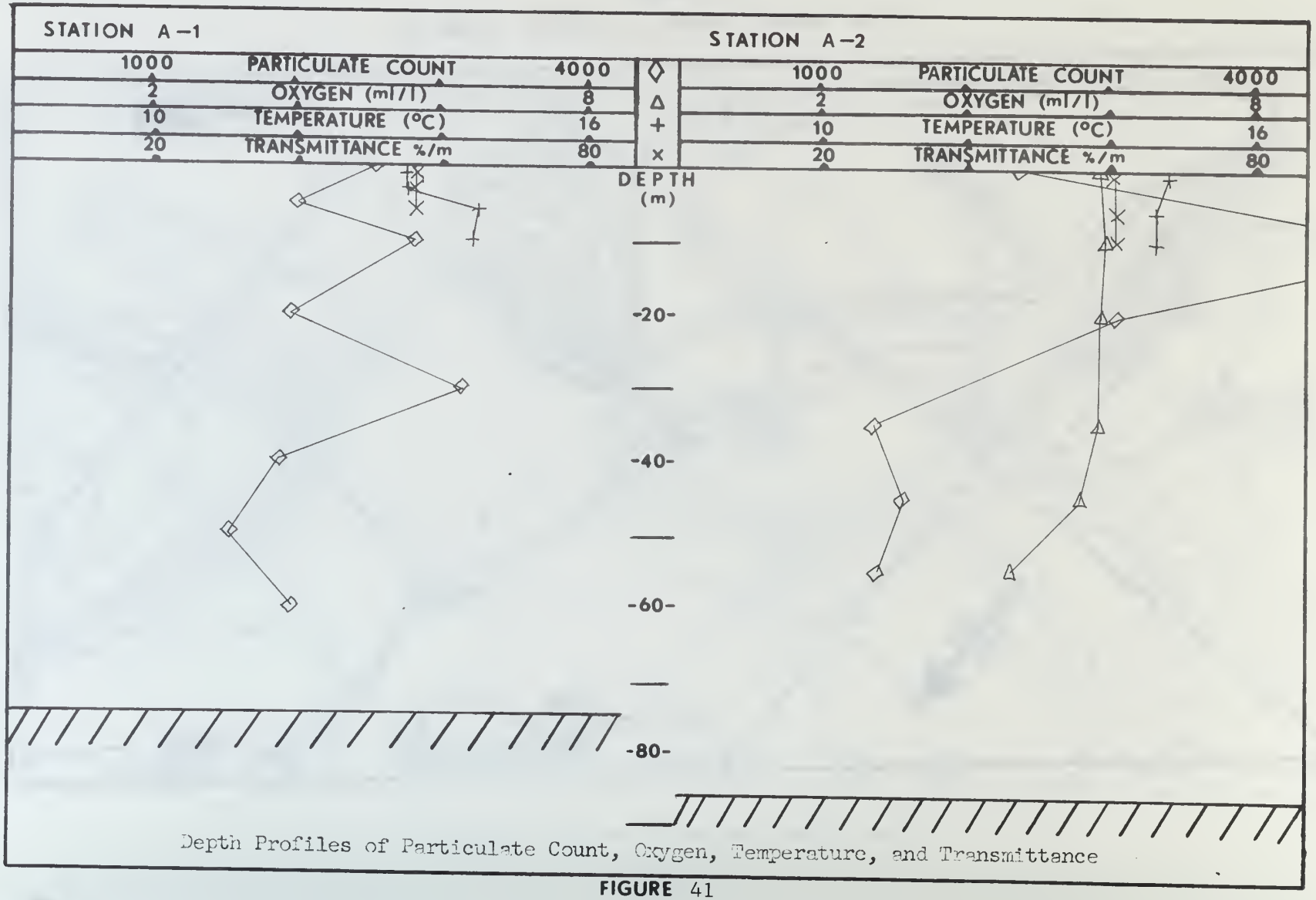

40 Meter Isolines of Oxygen Content (ml/l)

Figure 39



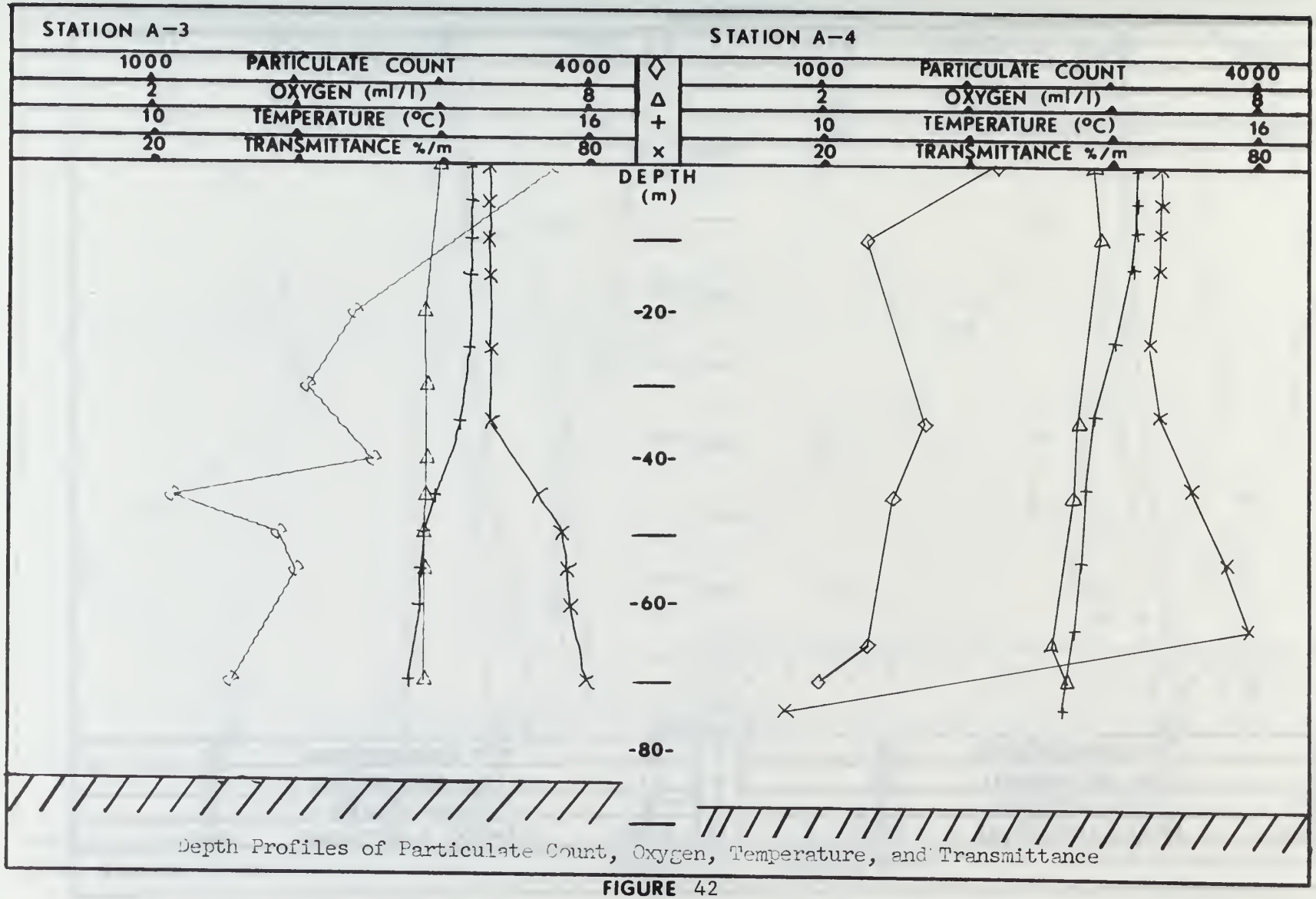

61 Meter Isolines of Oxygen Content (ml/l)

Figure 40




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 41




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 42

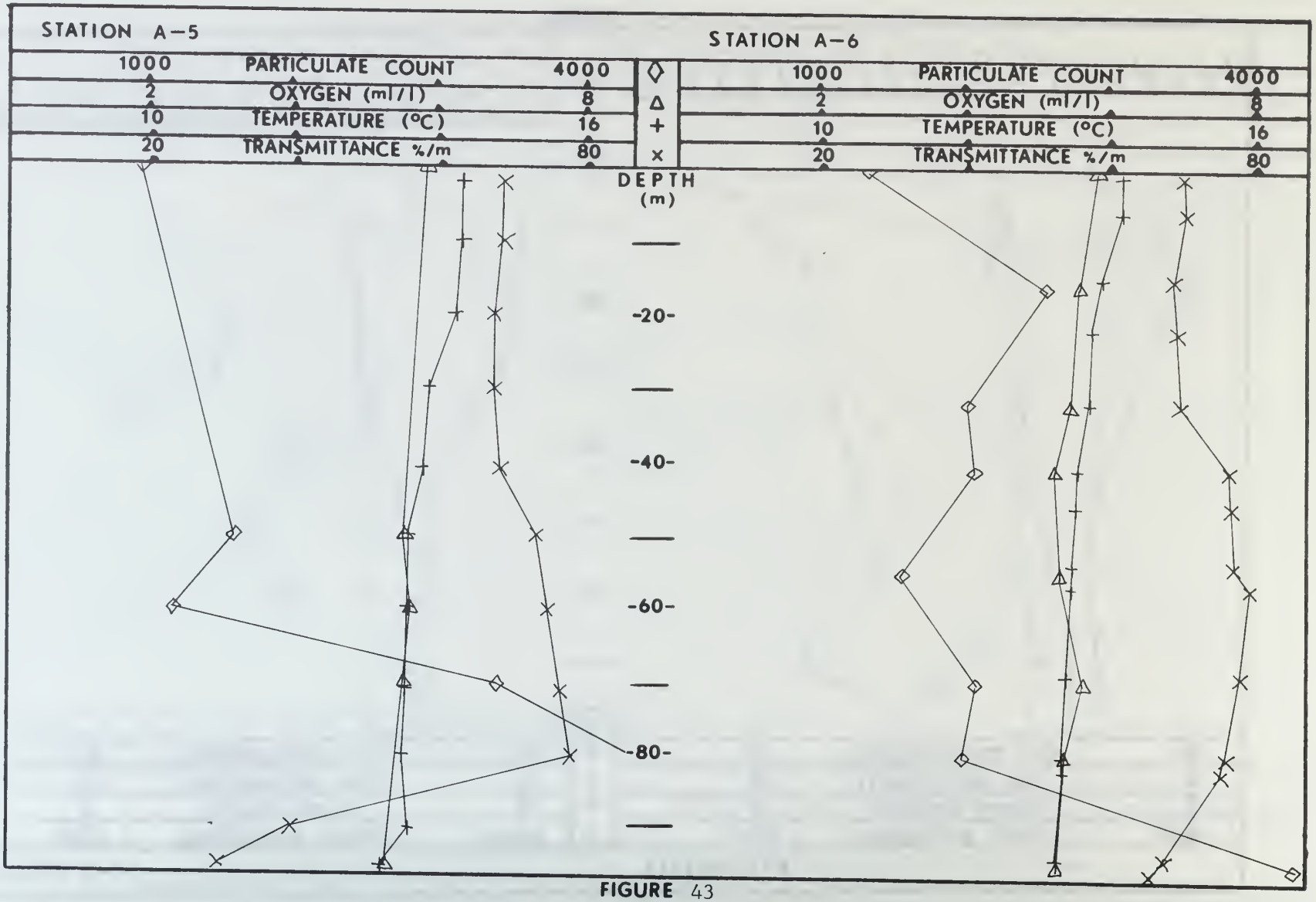

STATION A–5
STATION A–6
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◊
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 43

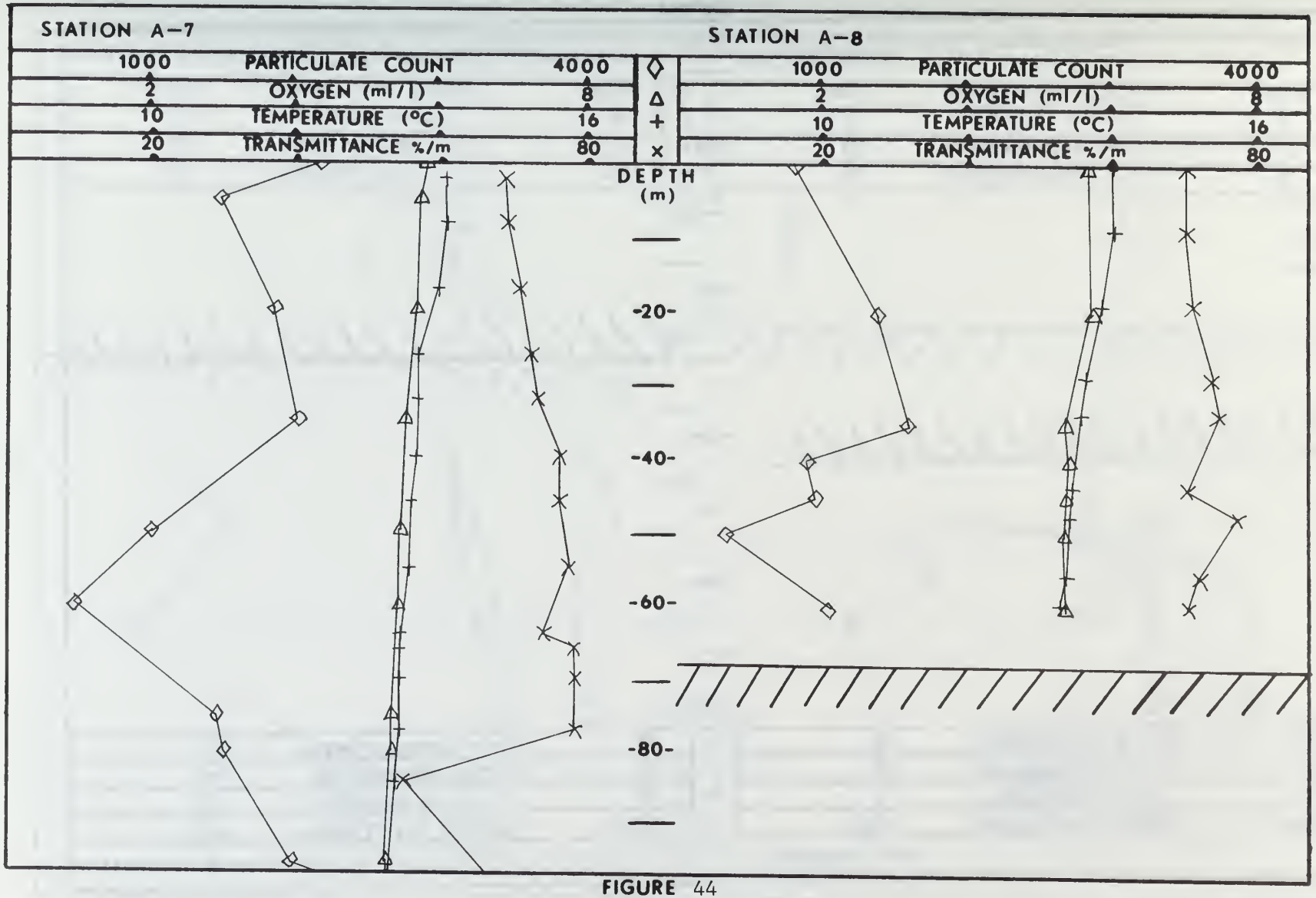
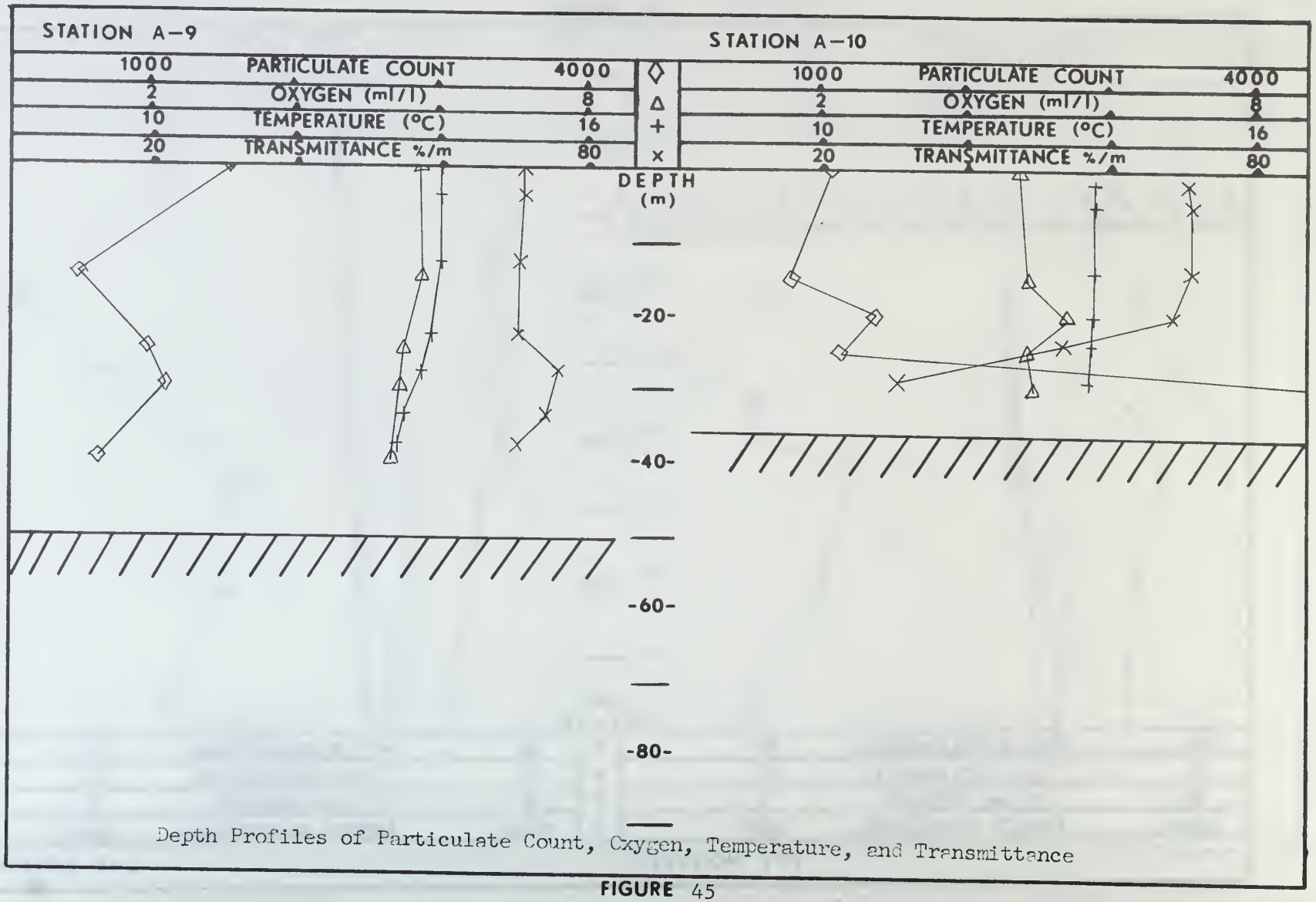
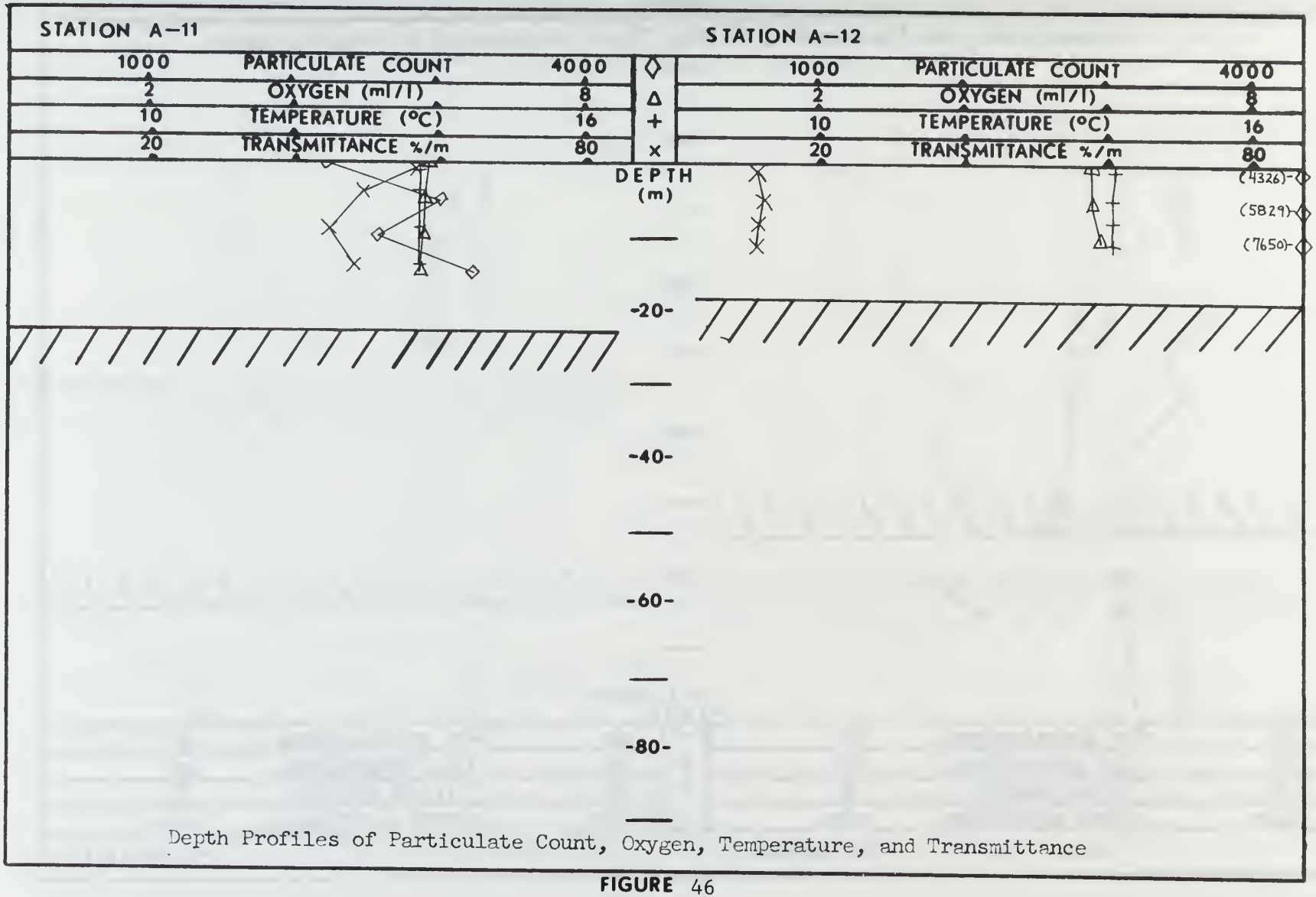

STATION A–7
STATION A–8
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
◊
Δ
+
×
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 44



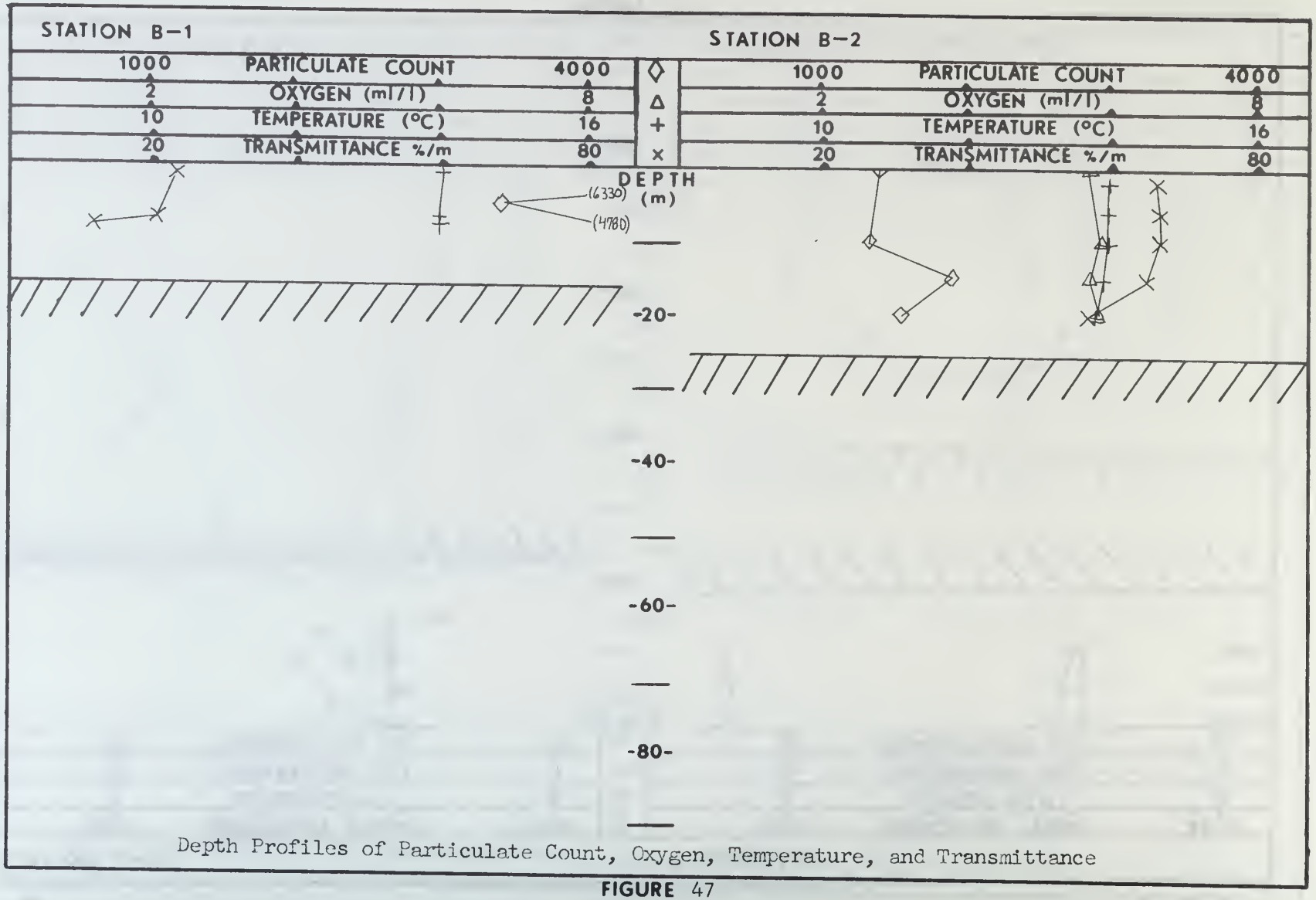

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 45



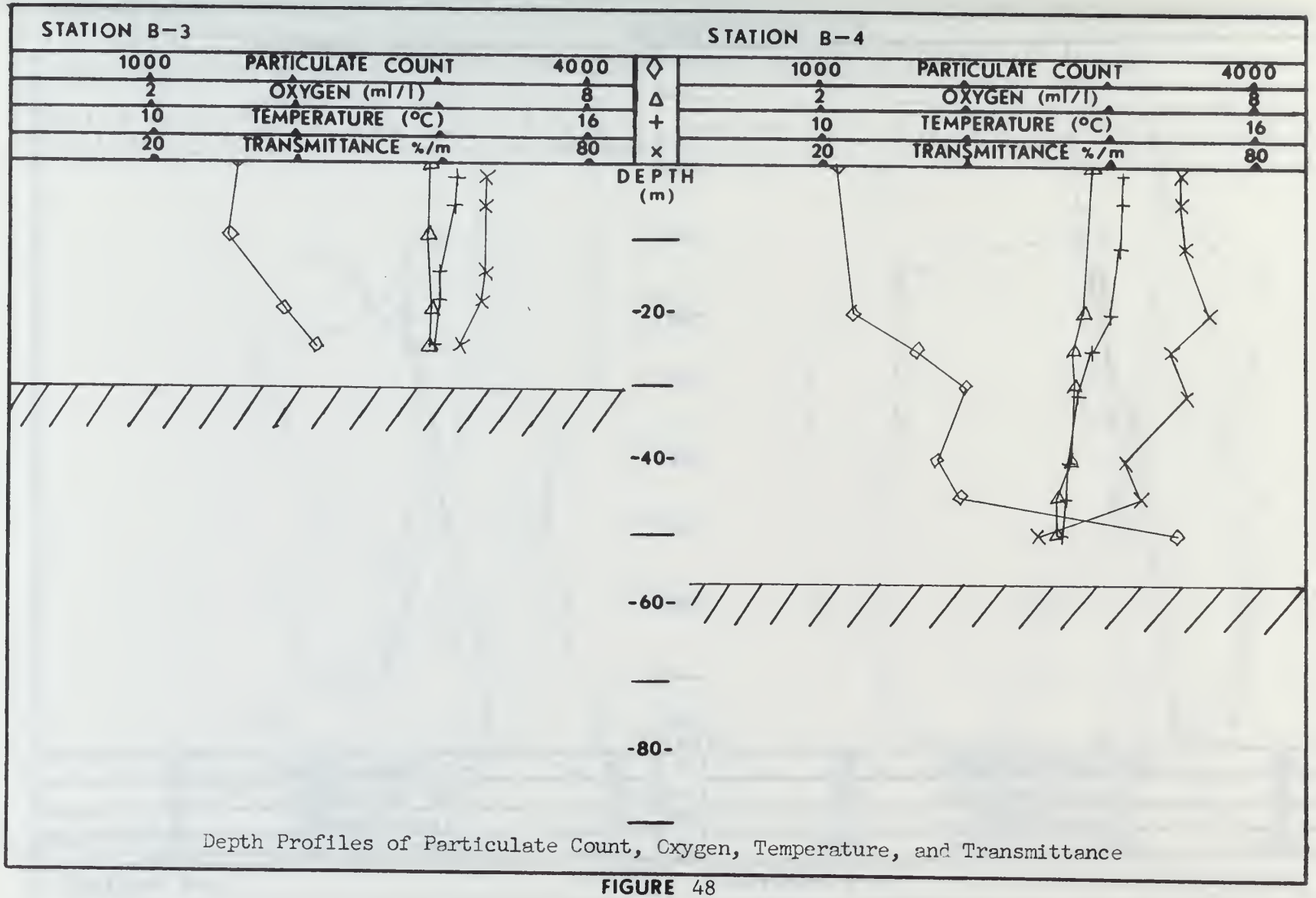

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 46



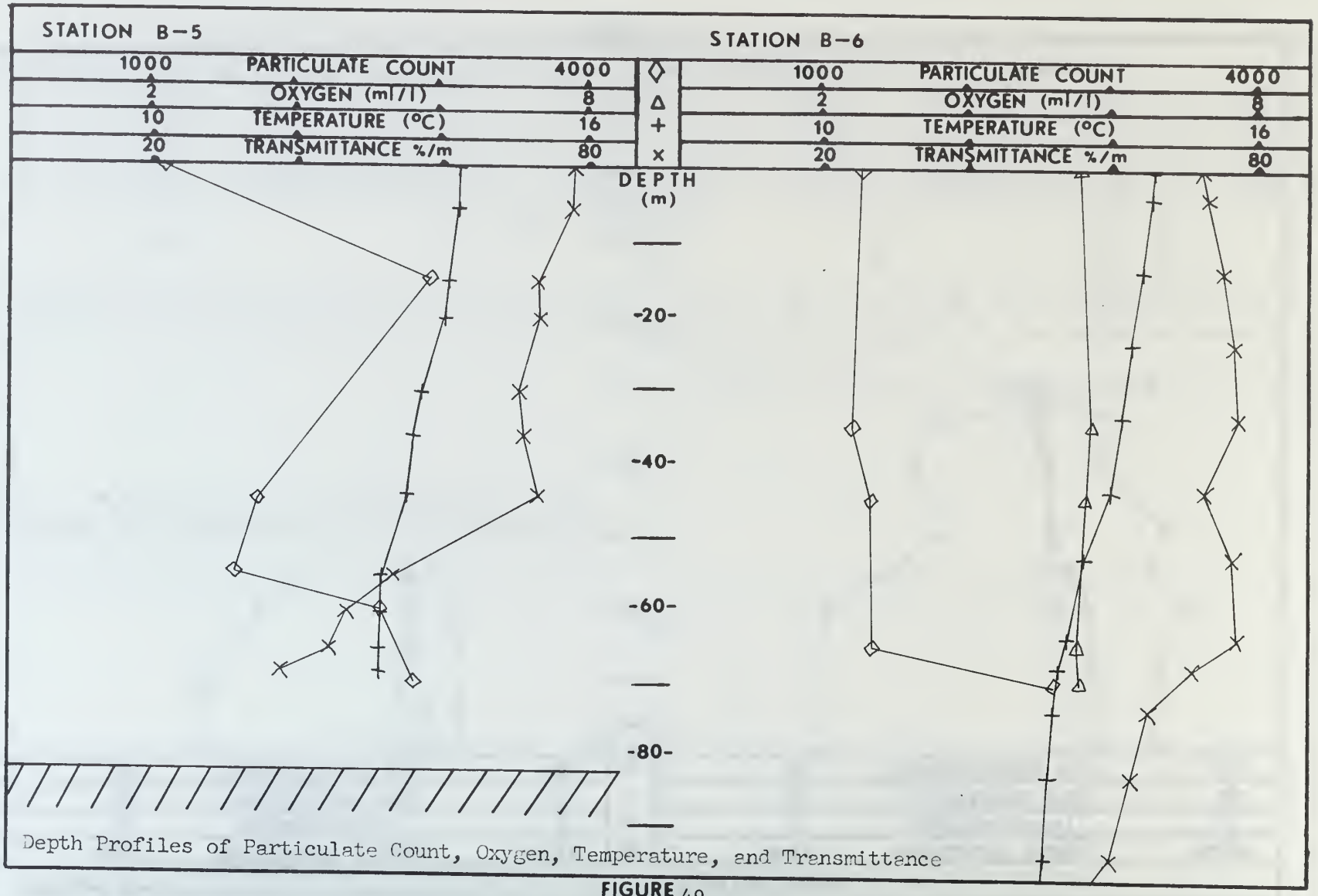

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 47




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 48




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 49

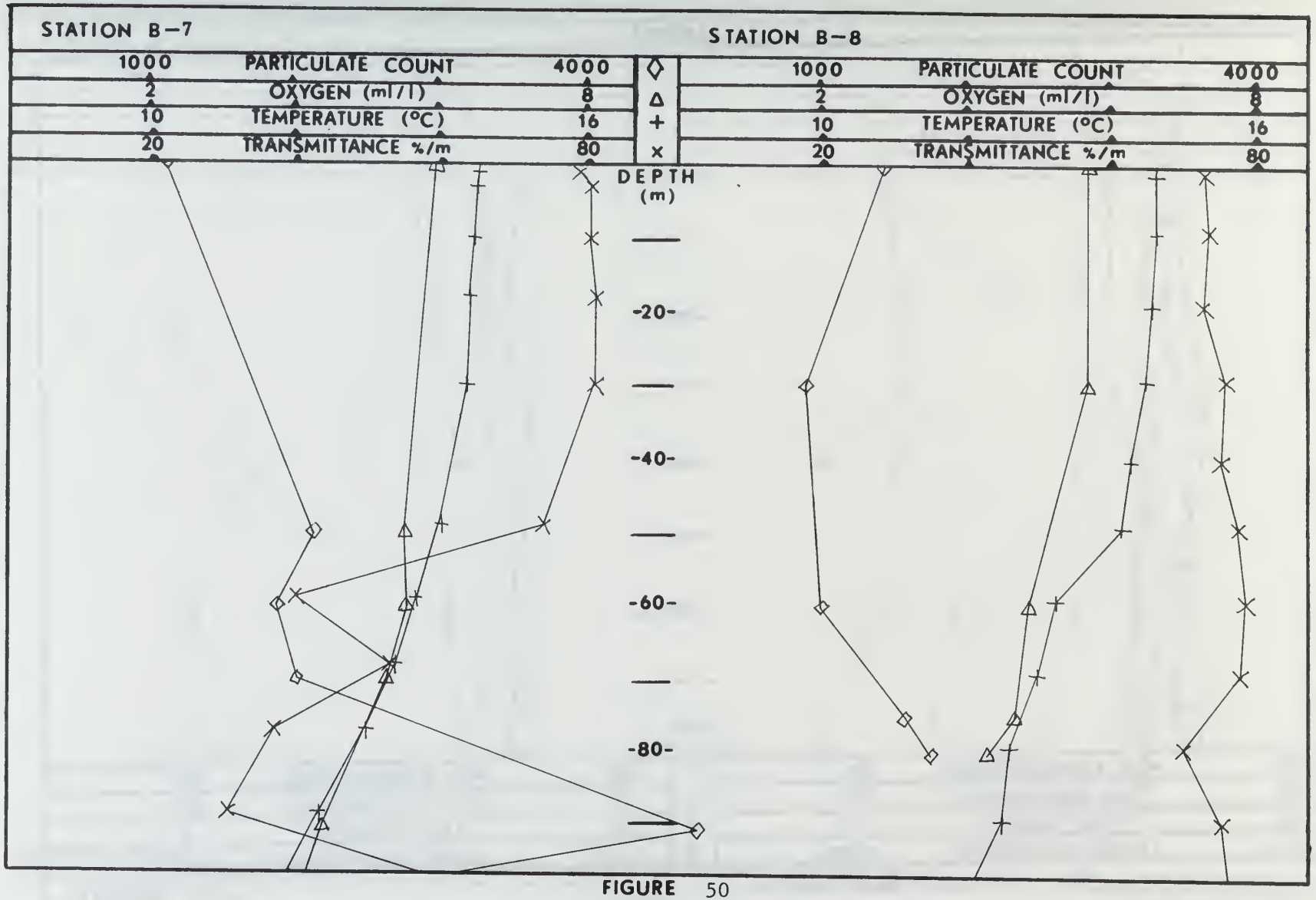

STATION B-7
STATION B-8
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 50

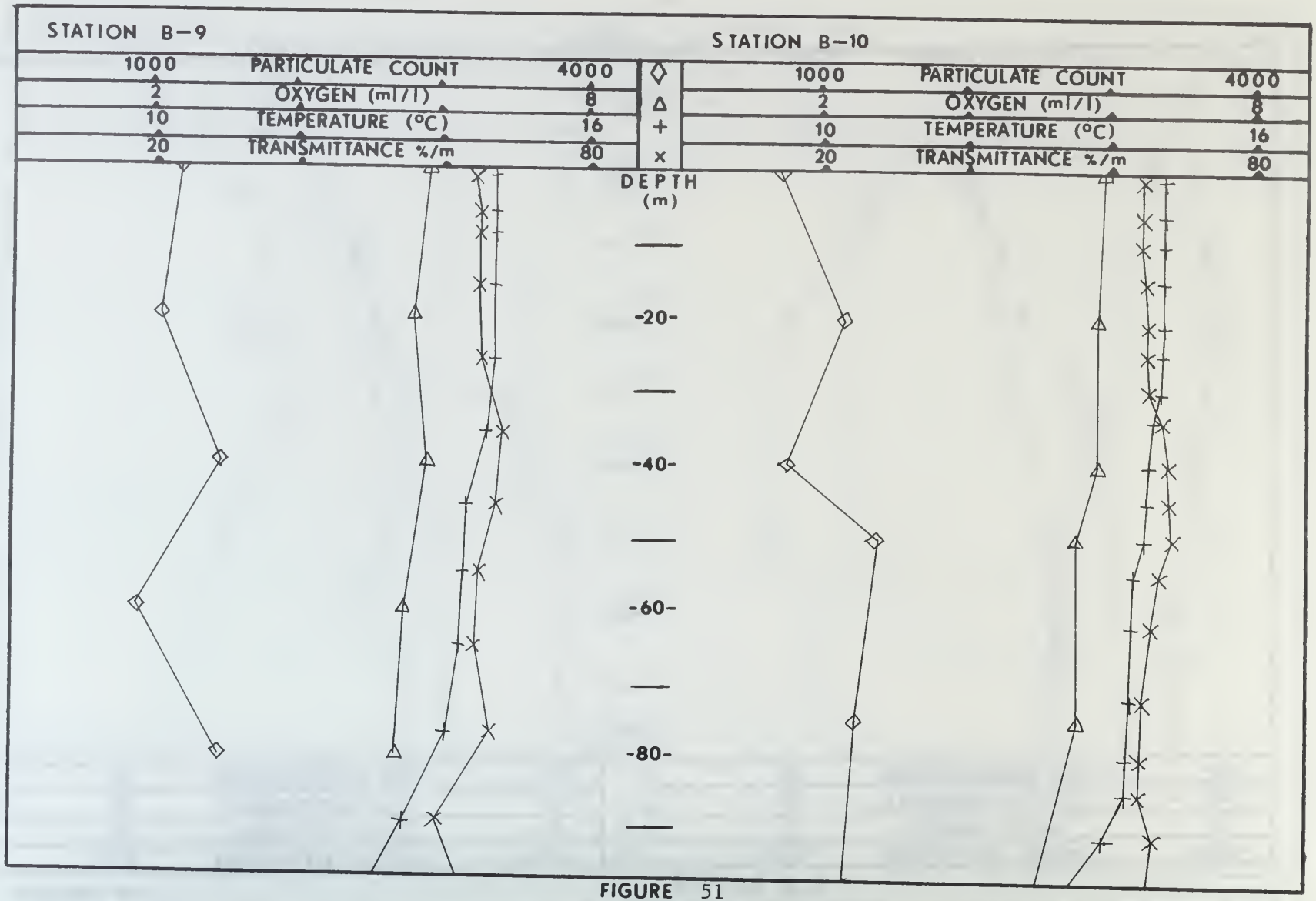
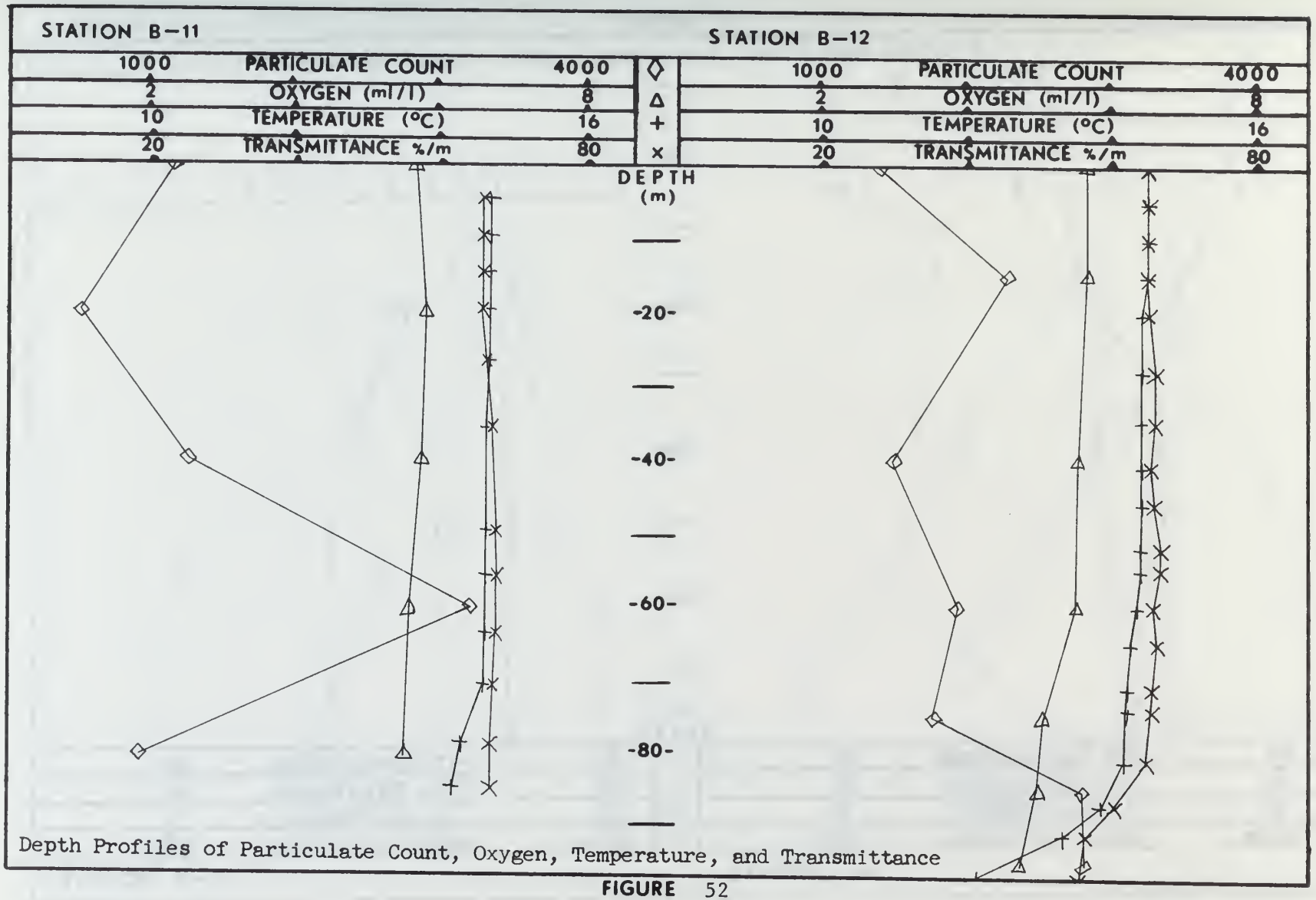
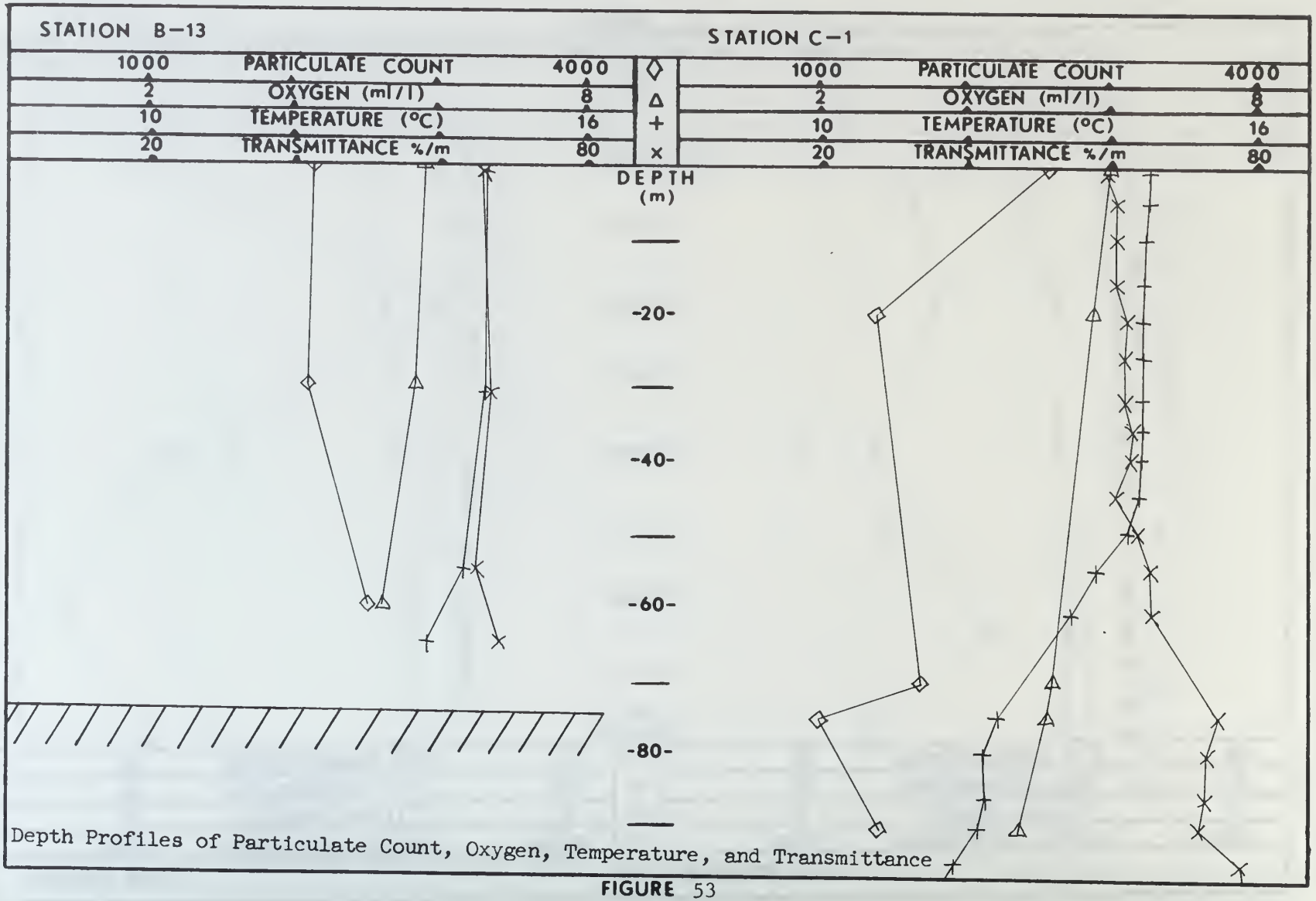

STATION B-9
STATION B-10
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◇
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 51




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 52




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 53

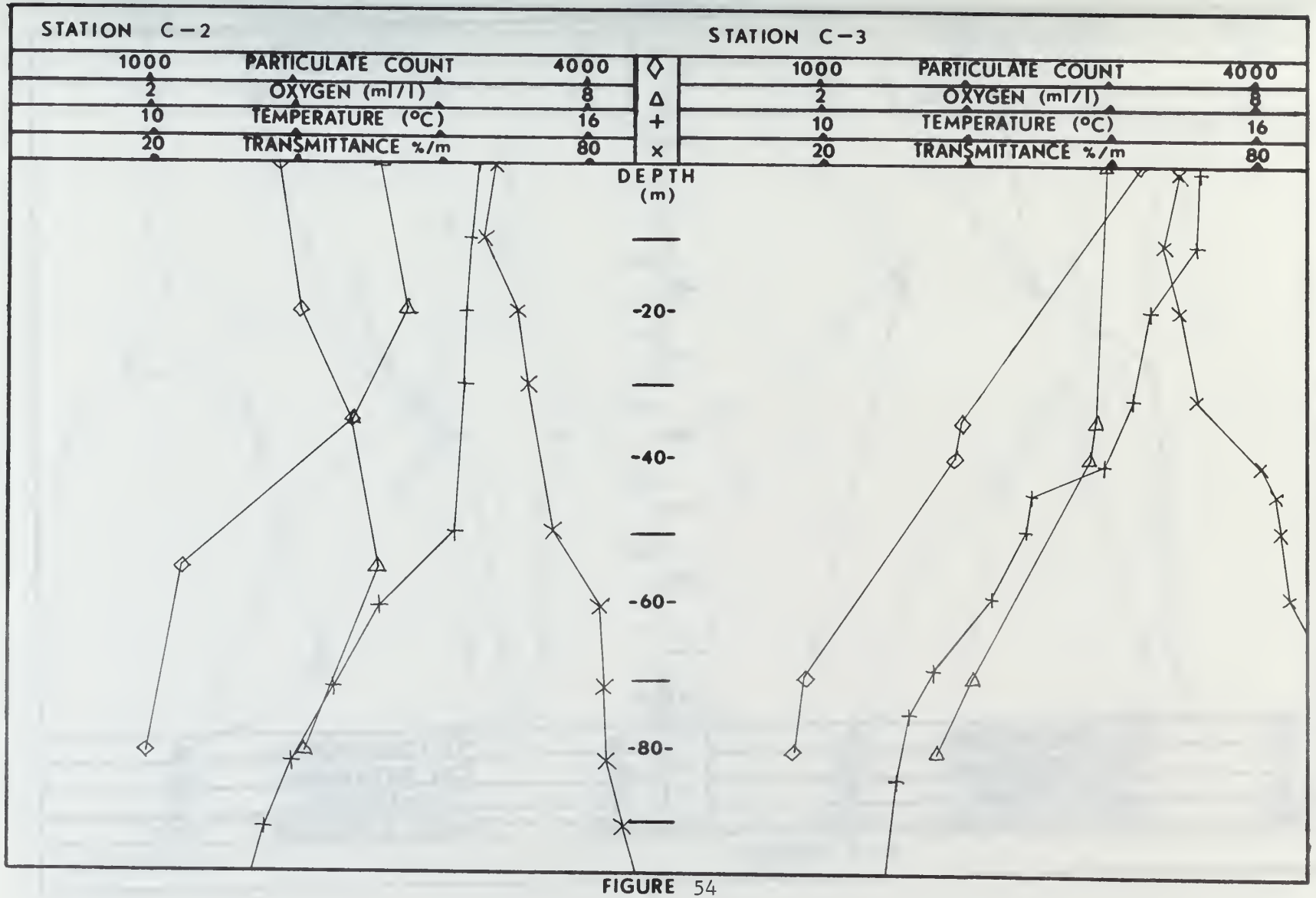

STATION C-2
STATION C-3
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
◊
Δ
+
x
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 54

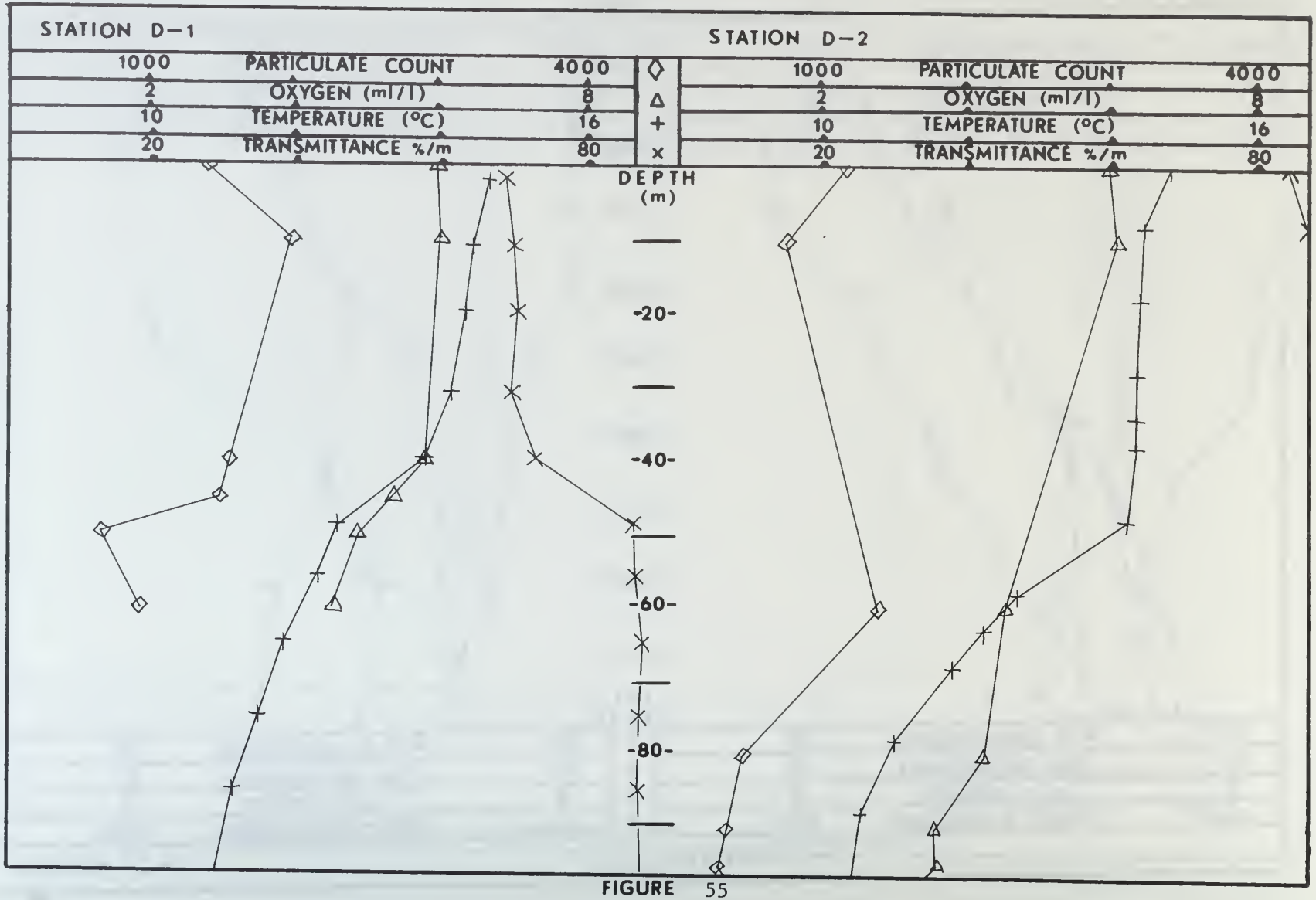

STATION D–1
STATION D–2
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◊
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 55

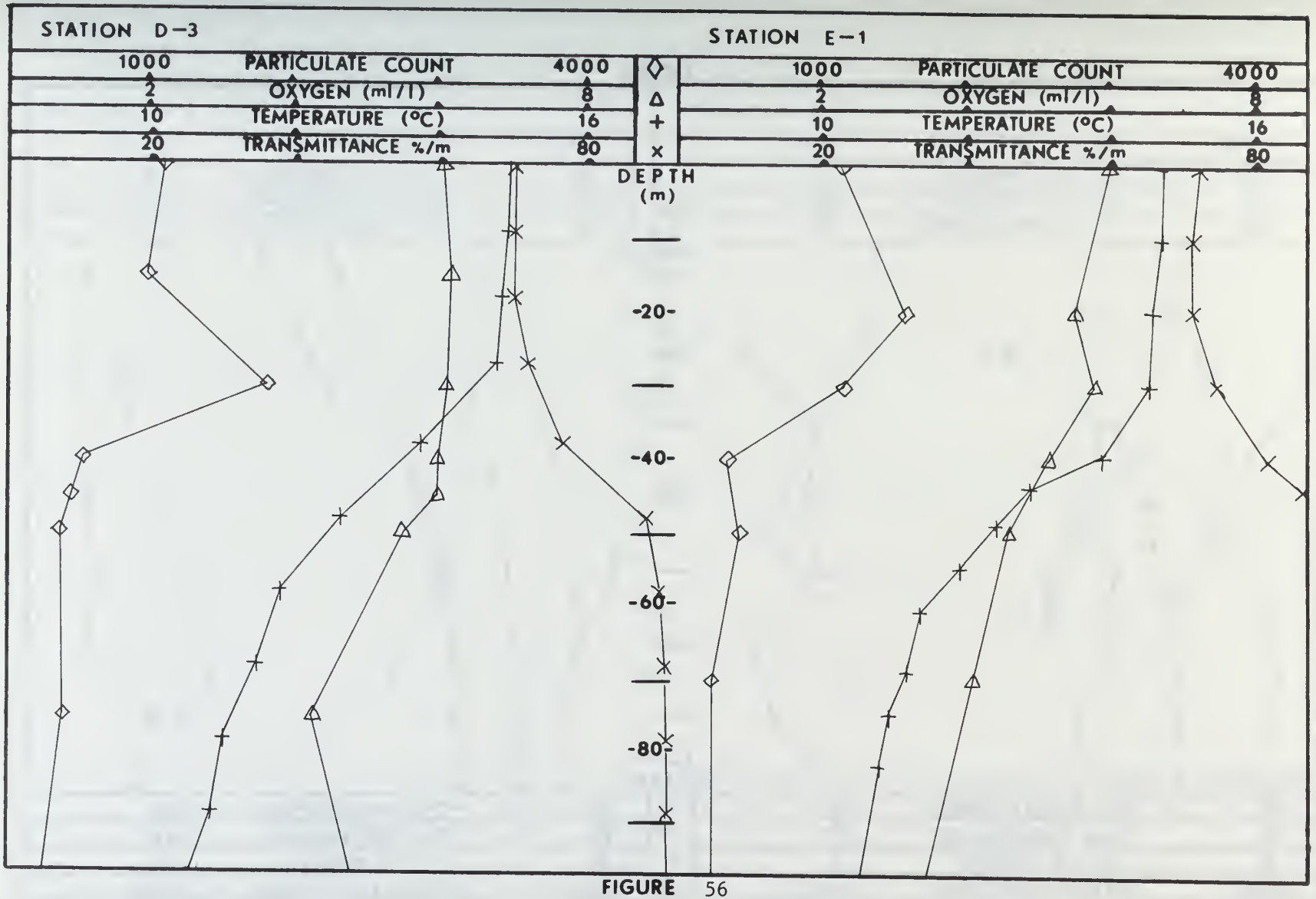

STATION D-3
STATION E-1
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 56

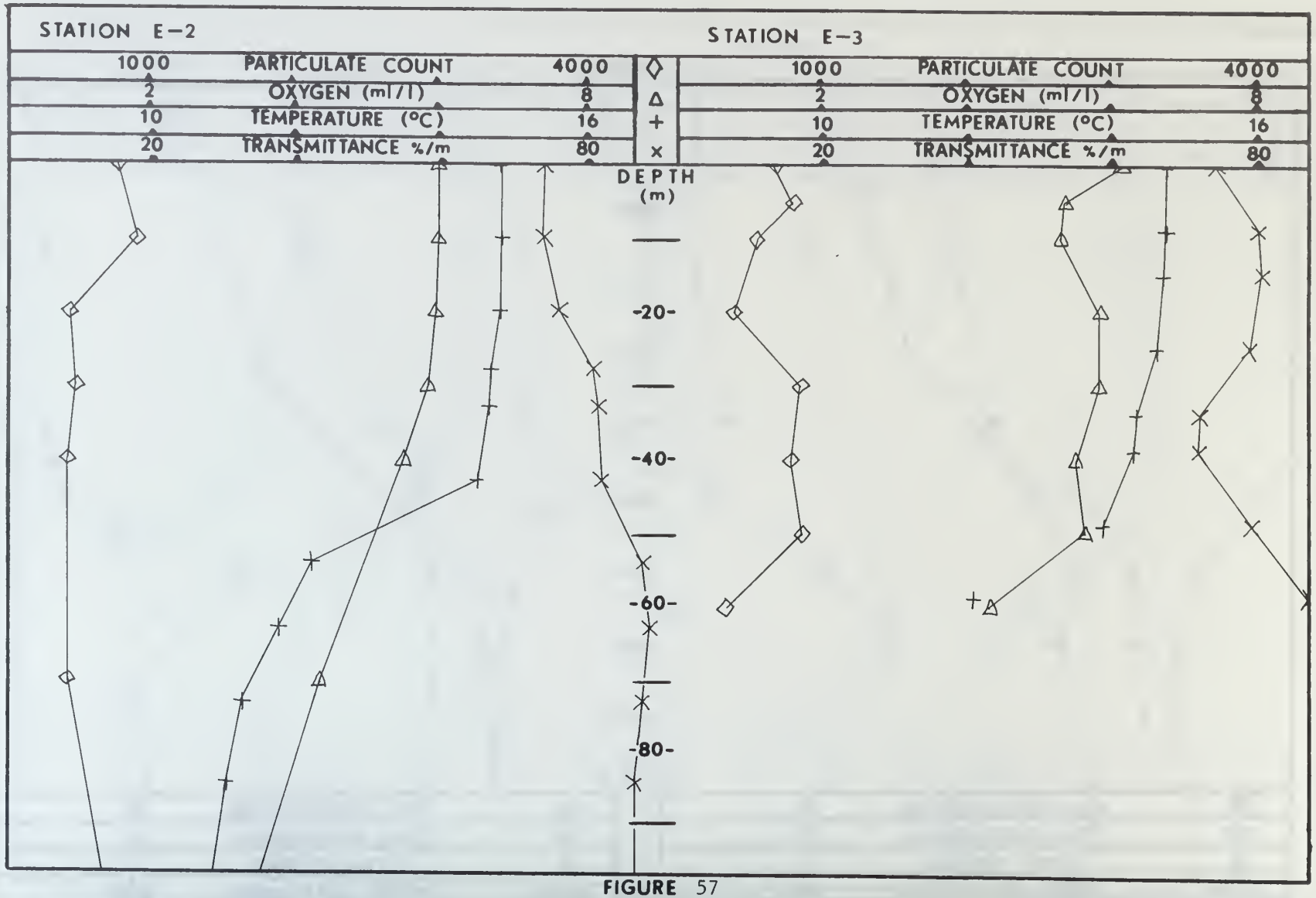

STATION E-2
STATION E-3
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 57

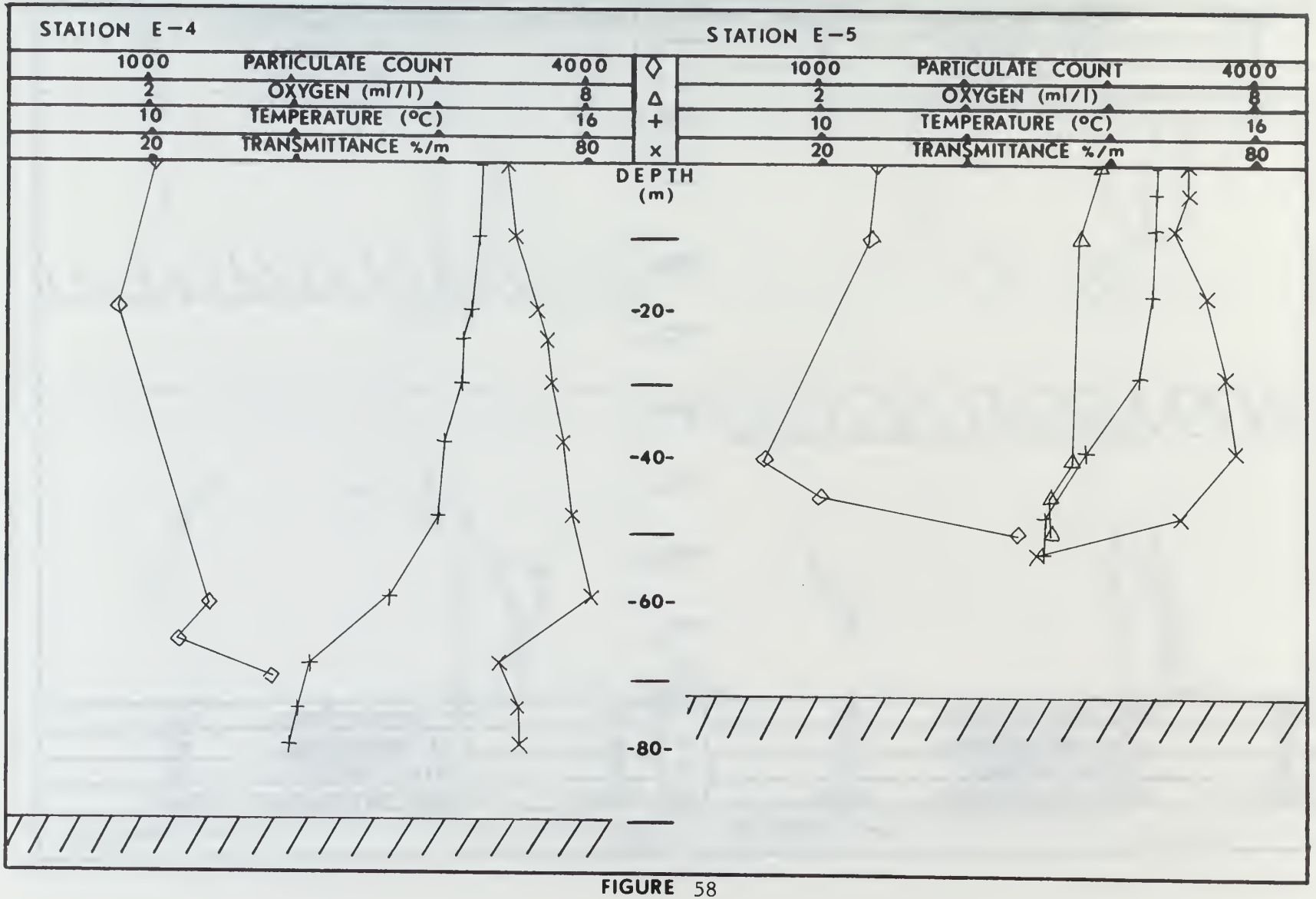
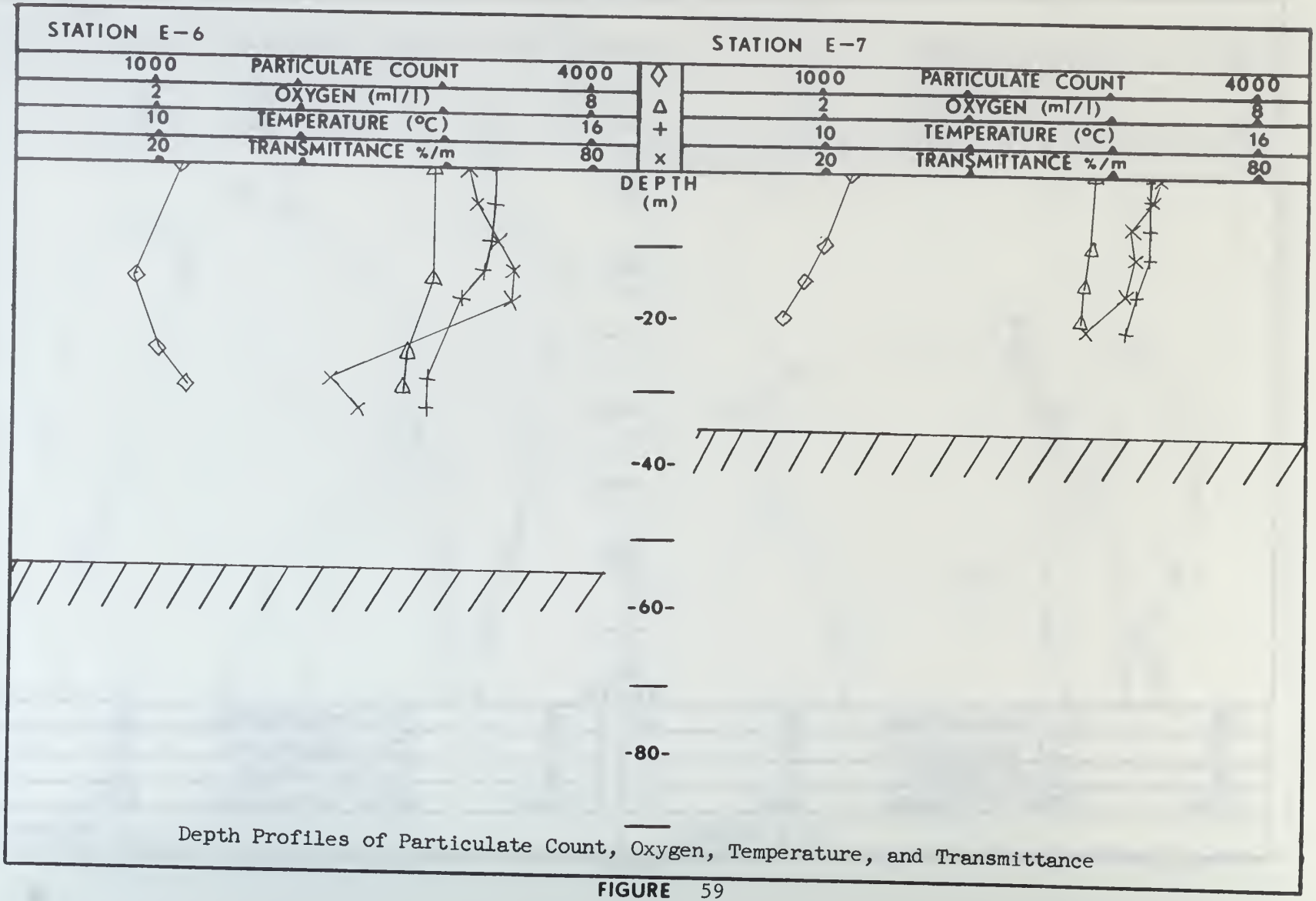
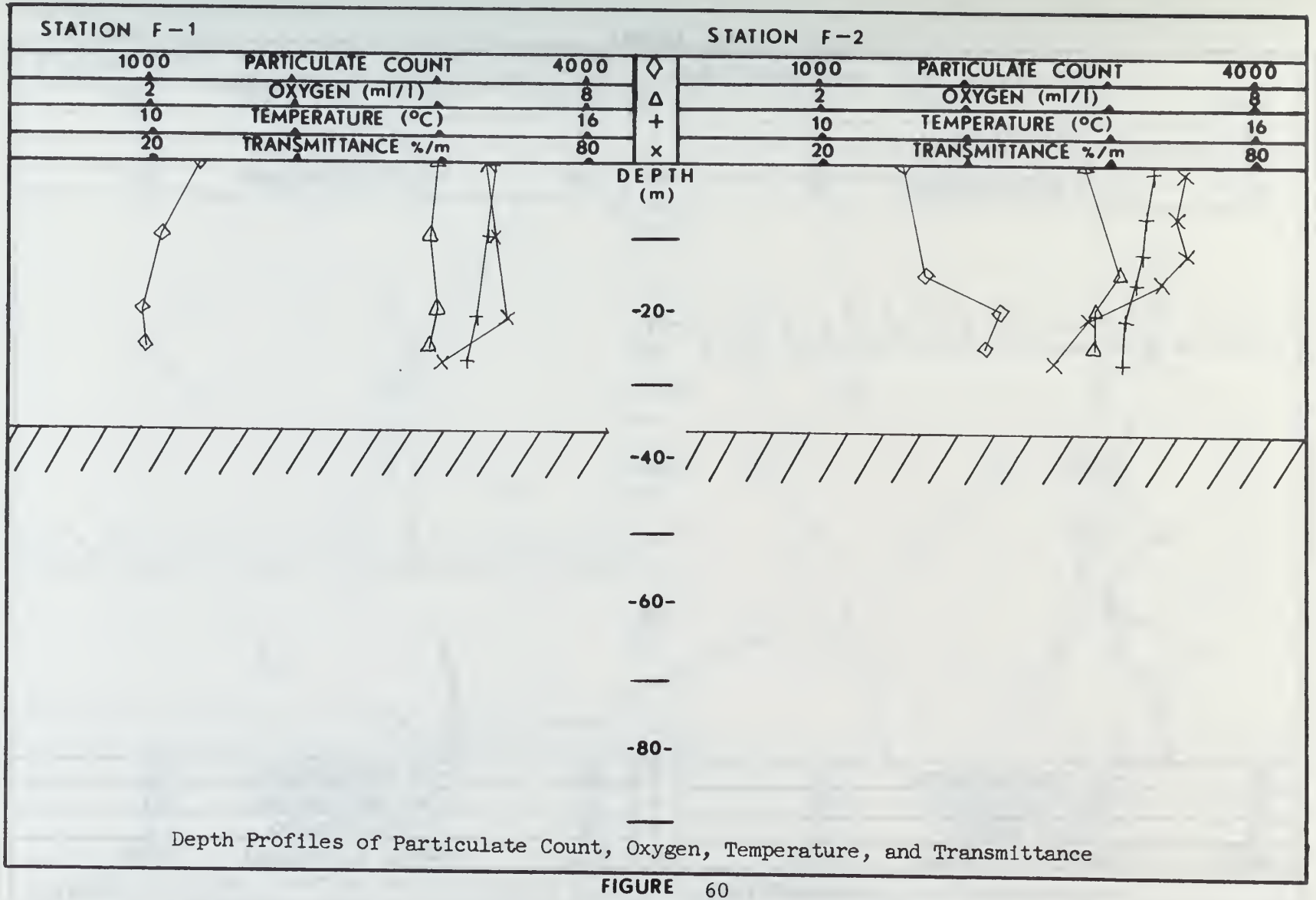

STATION E-4
STATION E-5
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
◊
Δ
+
×
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 58



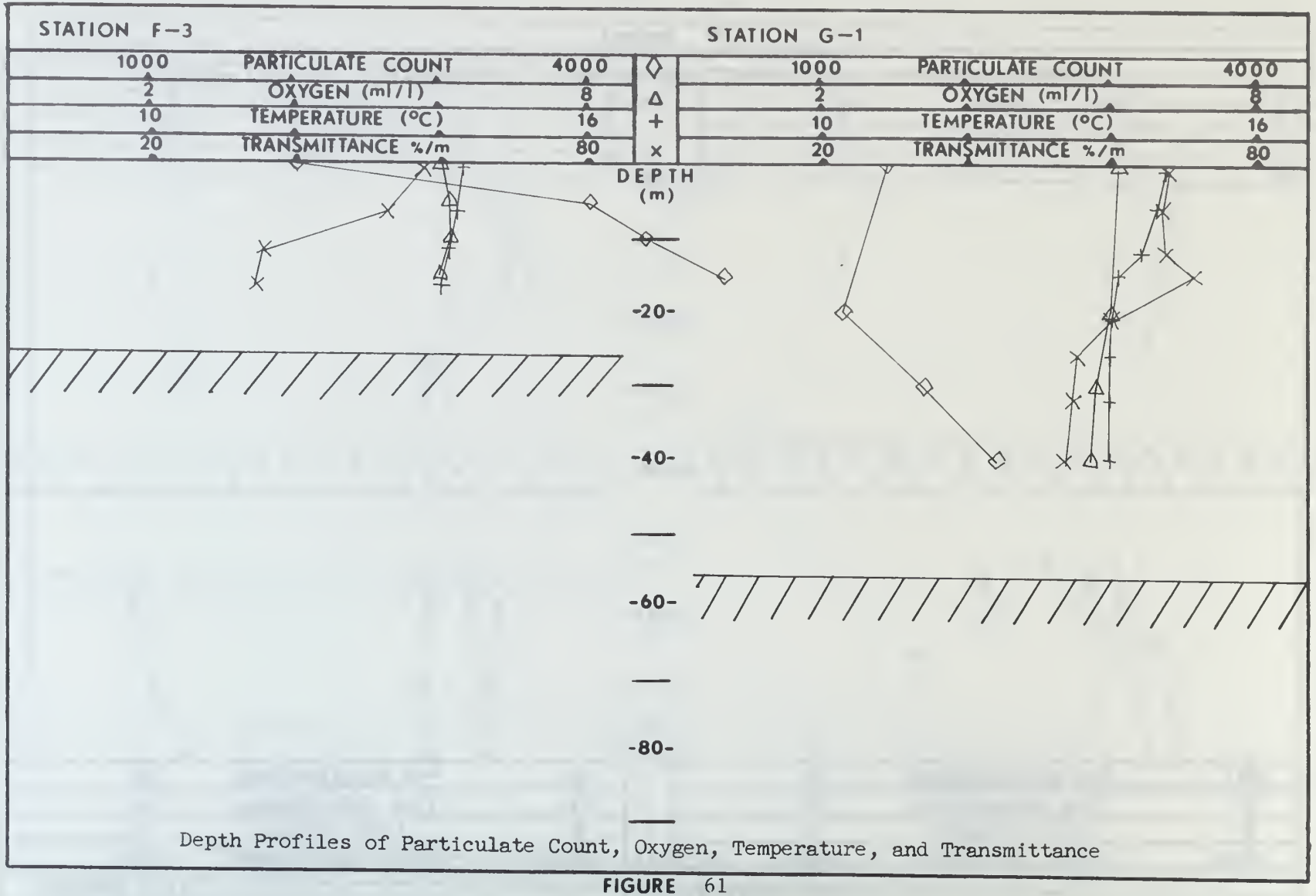

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 59



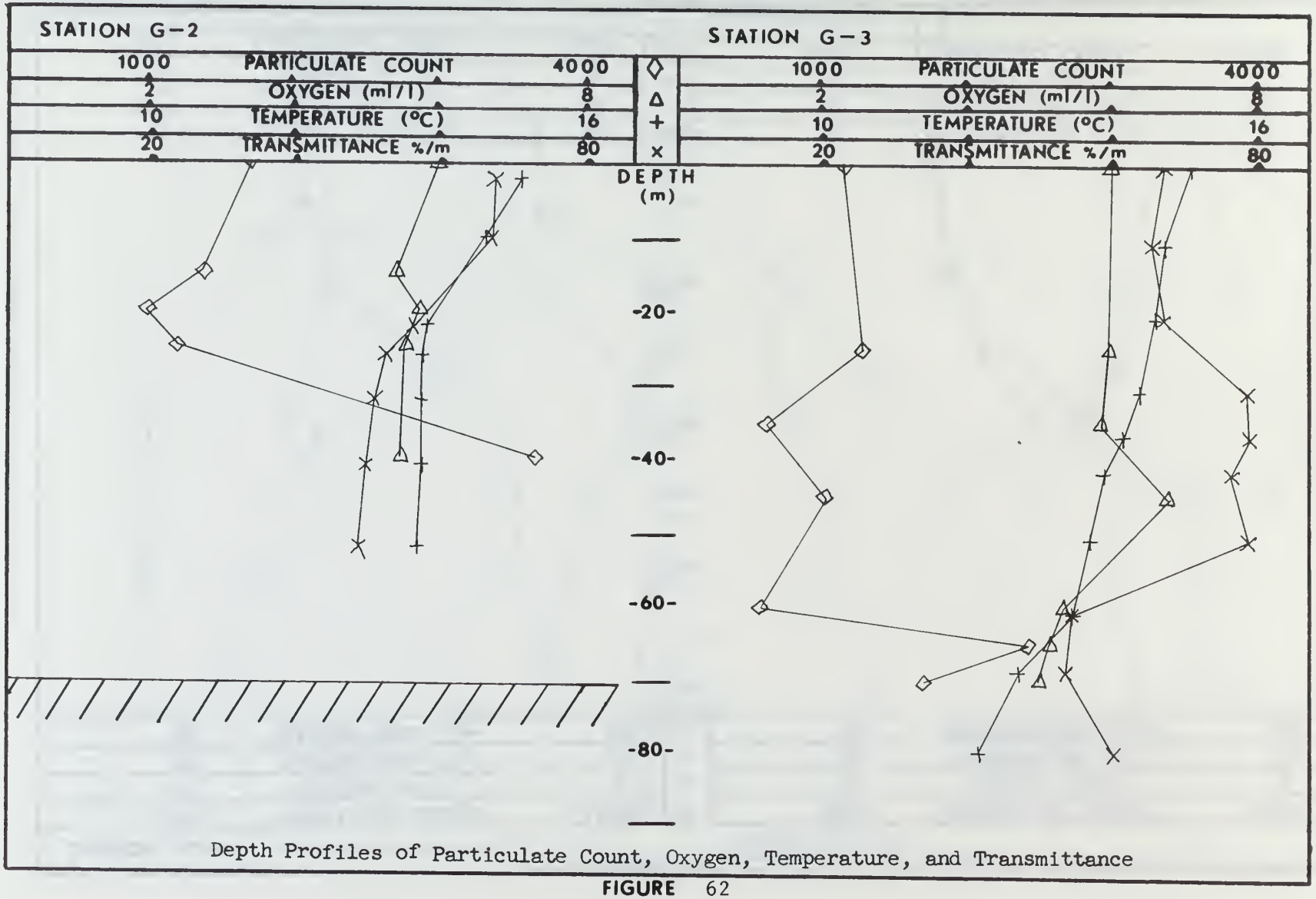

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 60




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 61




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 62

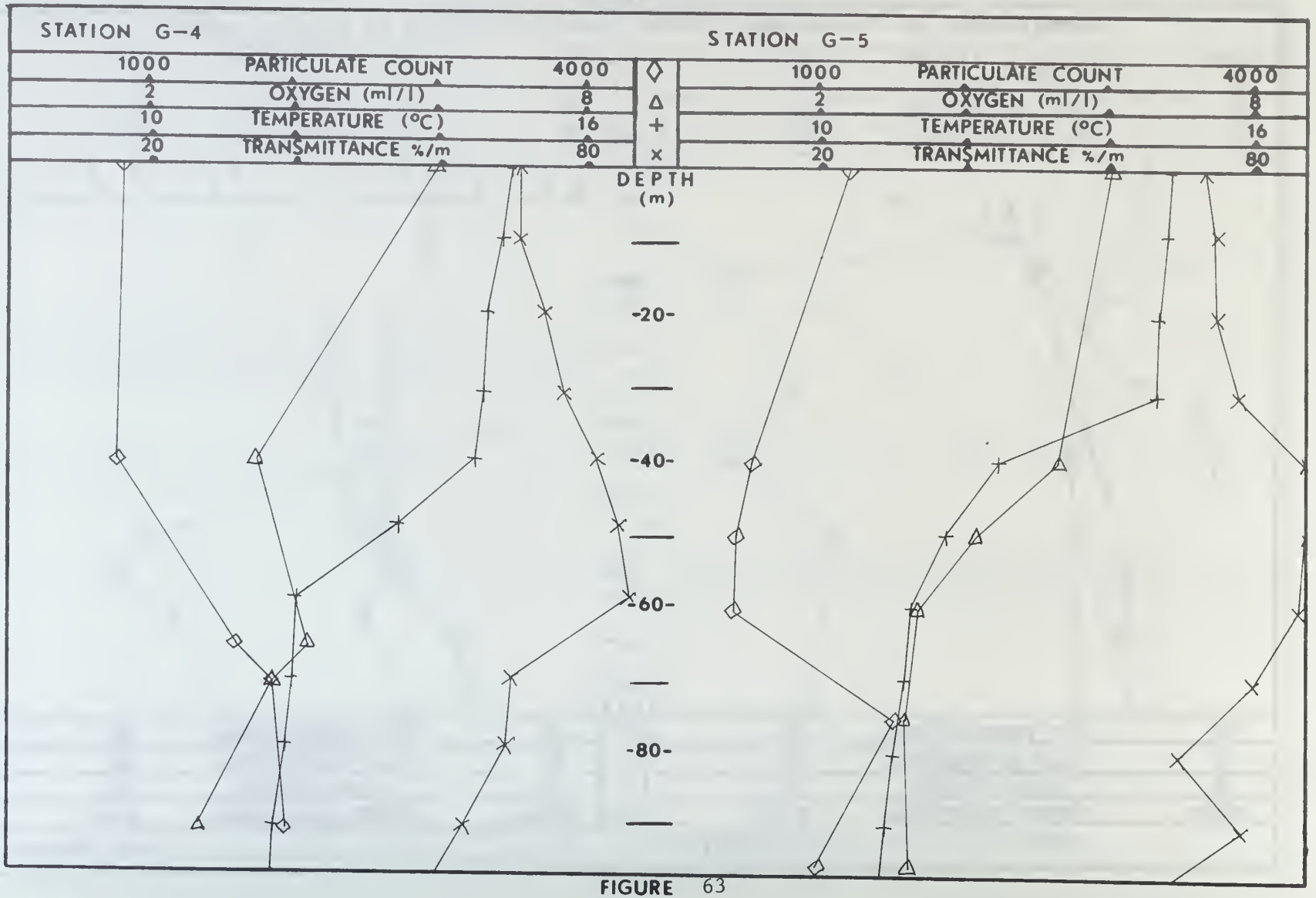

STATION G-4
STATION G-5
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
◊
Δ
+
×
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 63

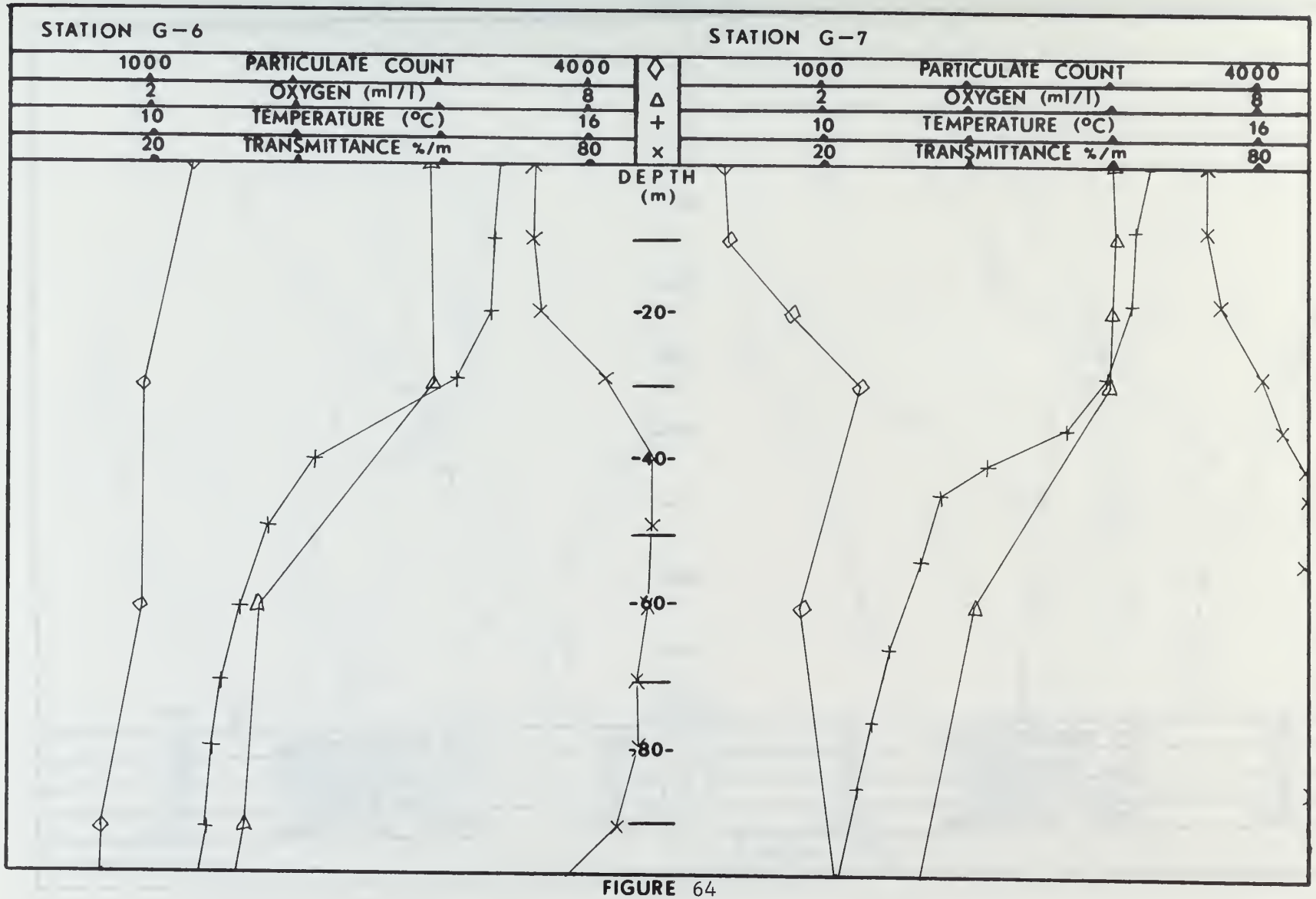

STATION G-6
STATION G-7
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◊
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 64

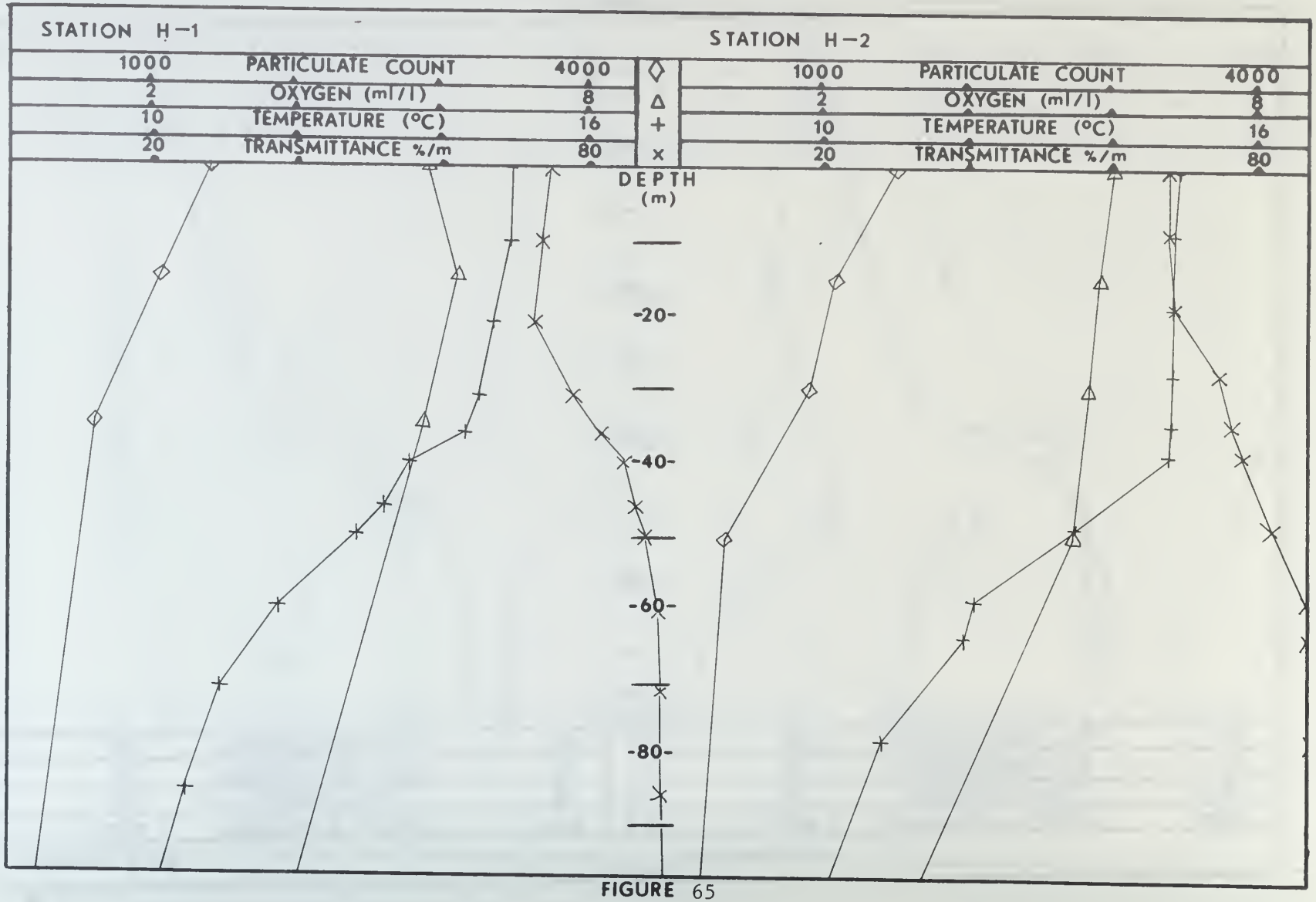

STATION H-1
STATION H-2
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◇
△
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 65

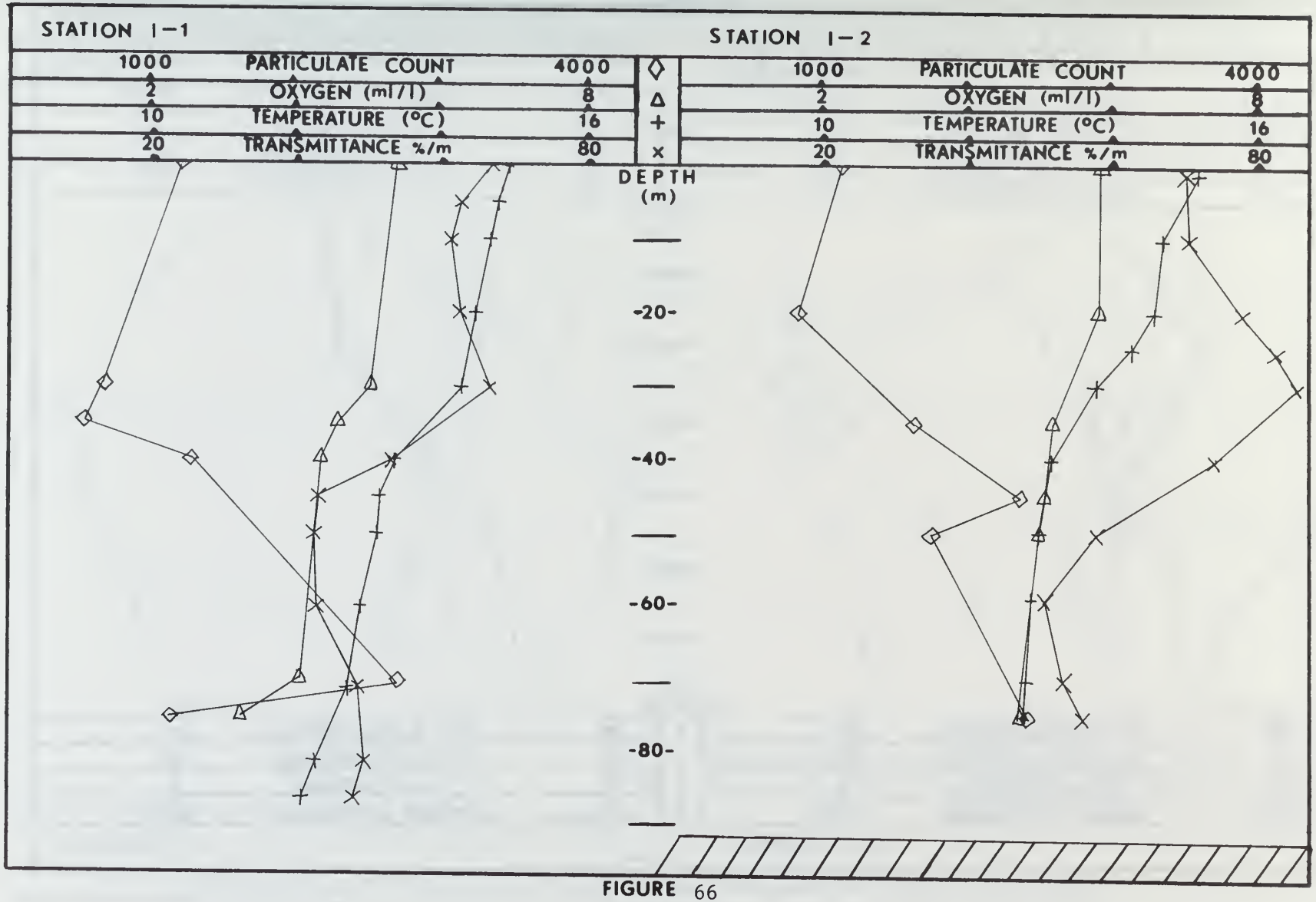

STATION 1-1
STATION 1-2
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 66

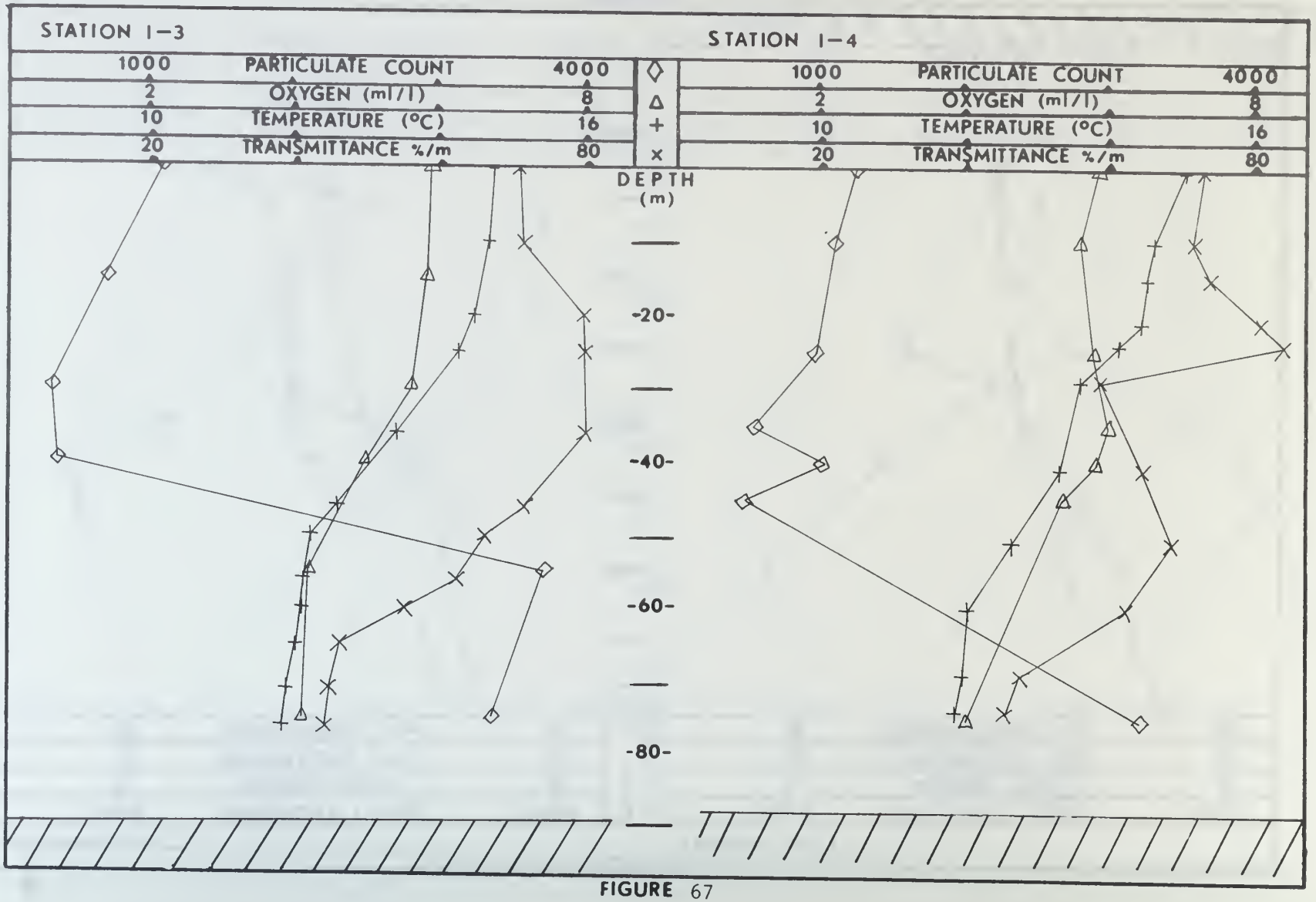
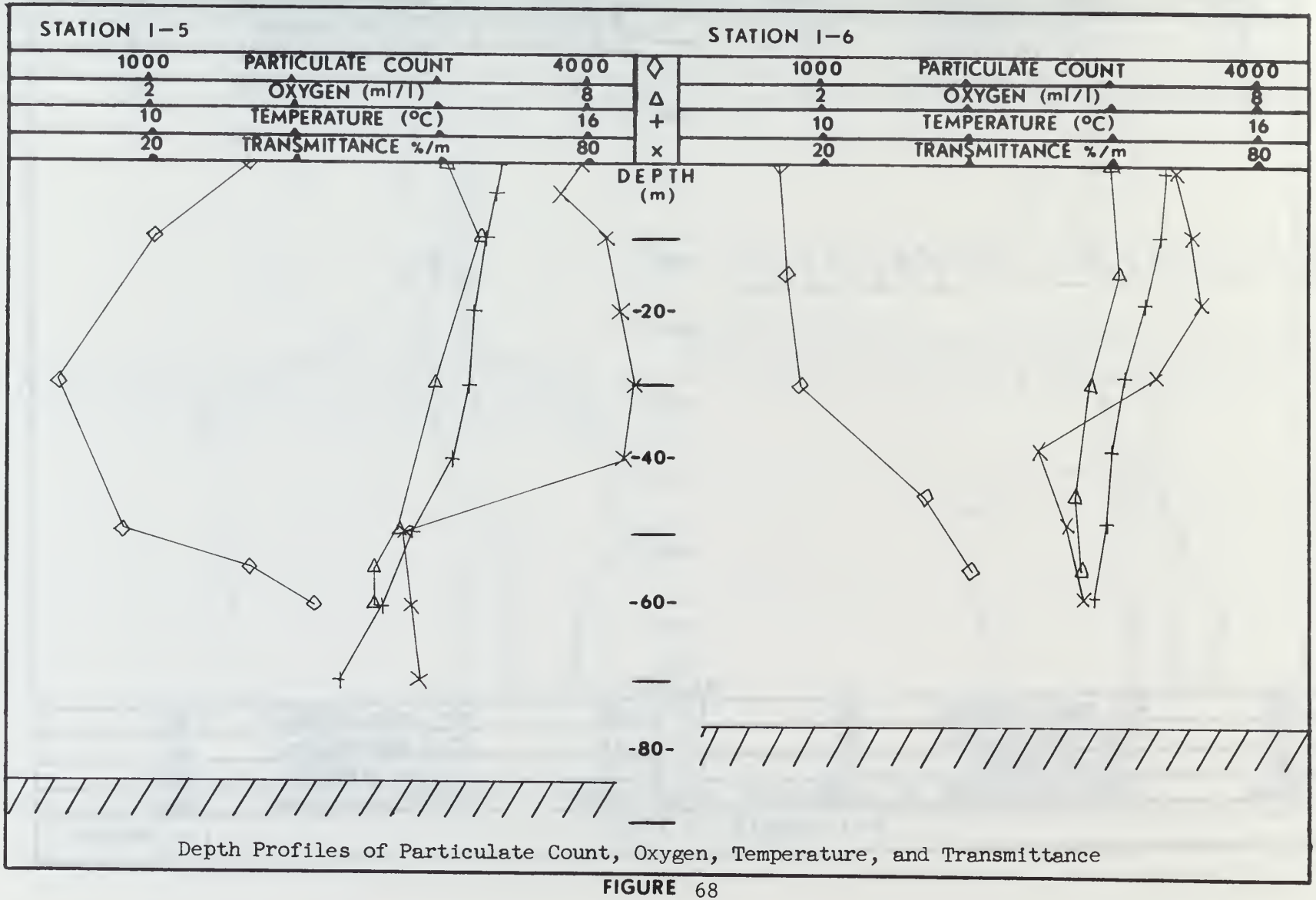

STATION 1–3
STATION 1–4
1000
PARTICULATE COUNT
4000
2
OXYGEN (ml/l)
8
10
TEMPERATURE (°C)
16
20
TRANSMITTANCE %/m
80
◇
△
+
×
DEPTH
(m)
-20-
-40-
-60-
-80-

FIGURE 67




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 68

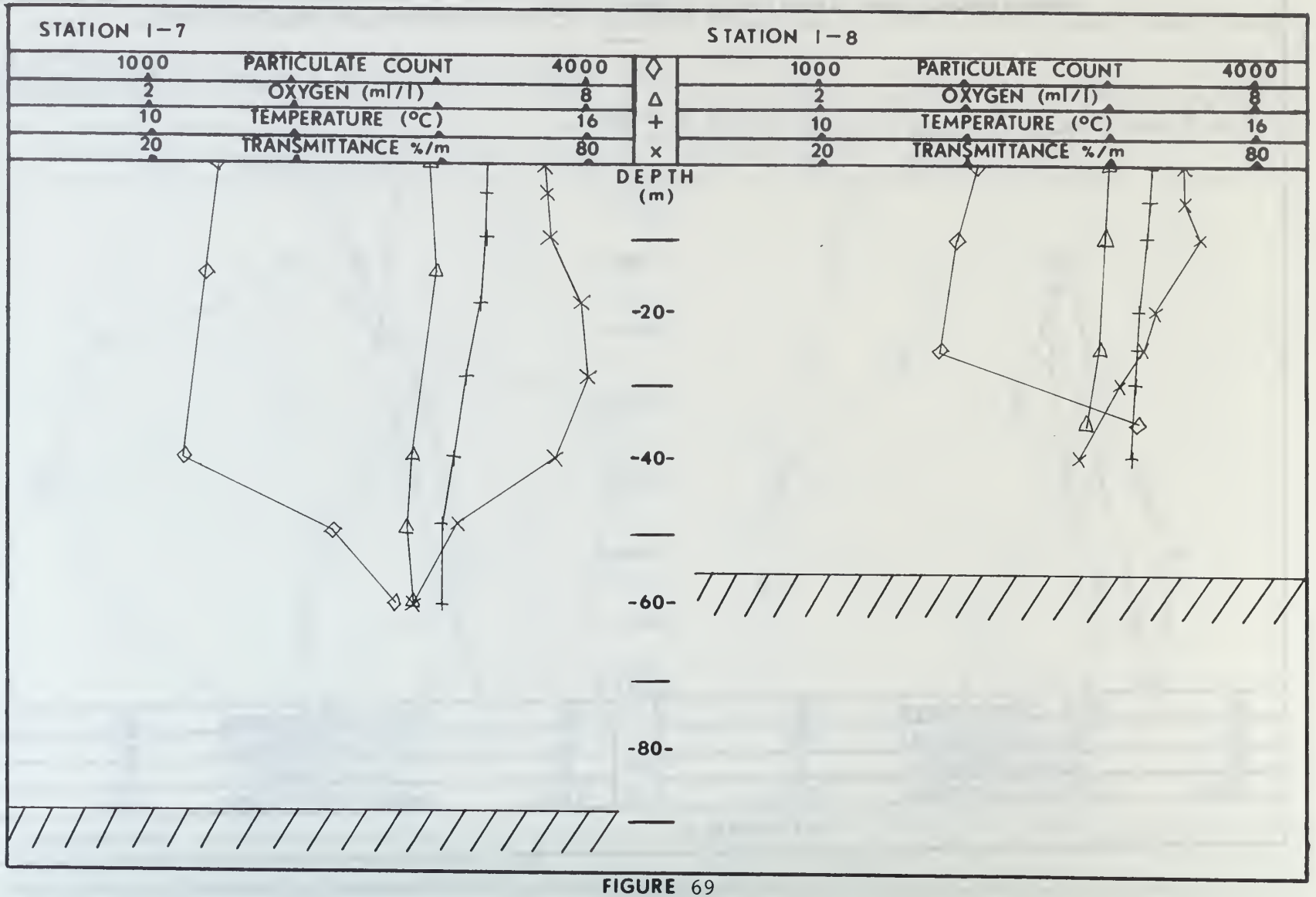
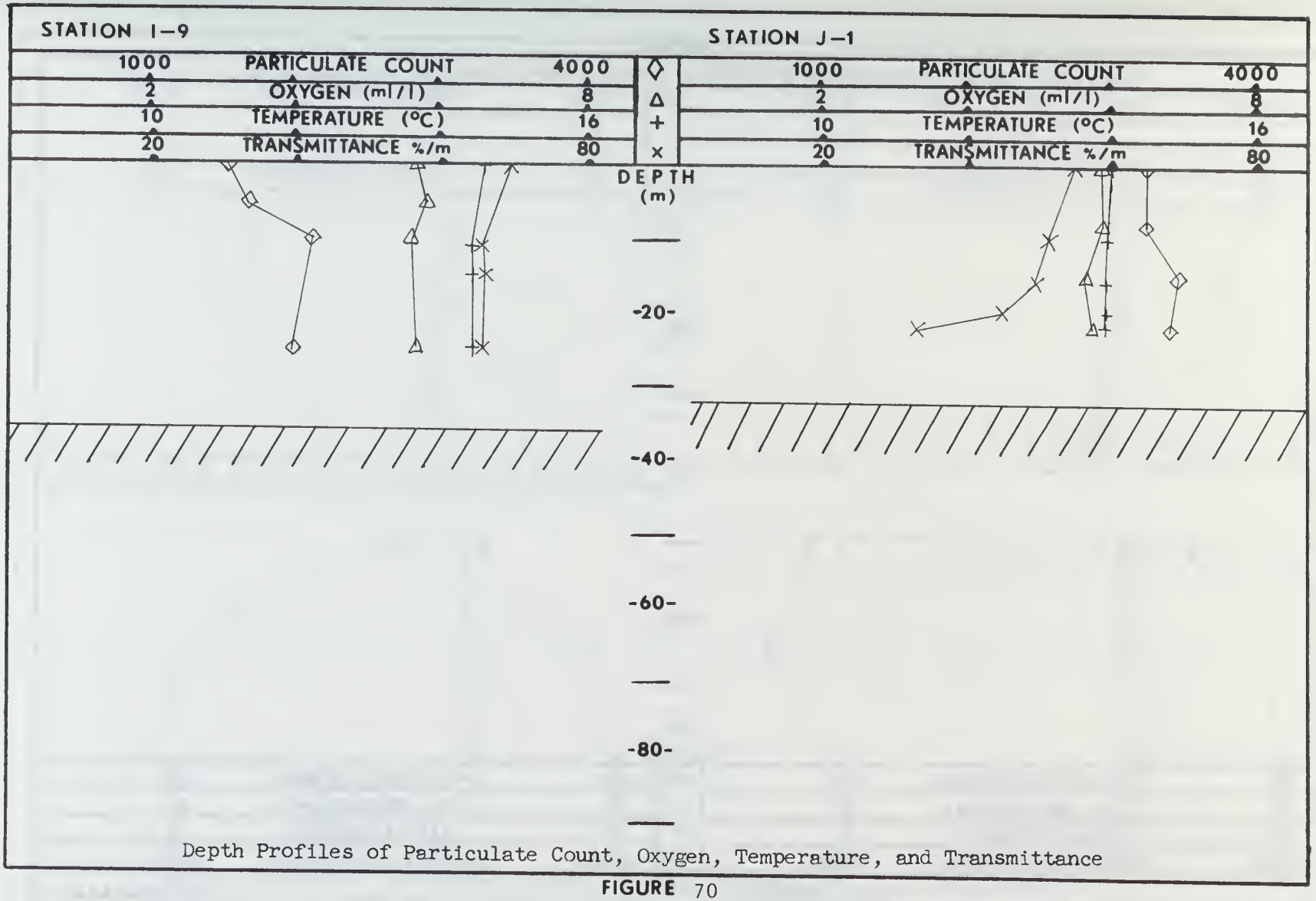
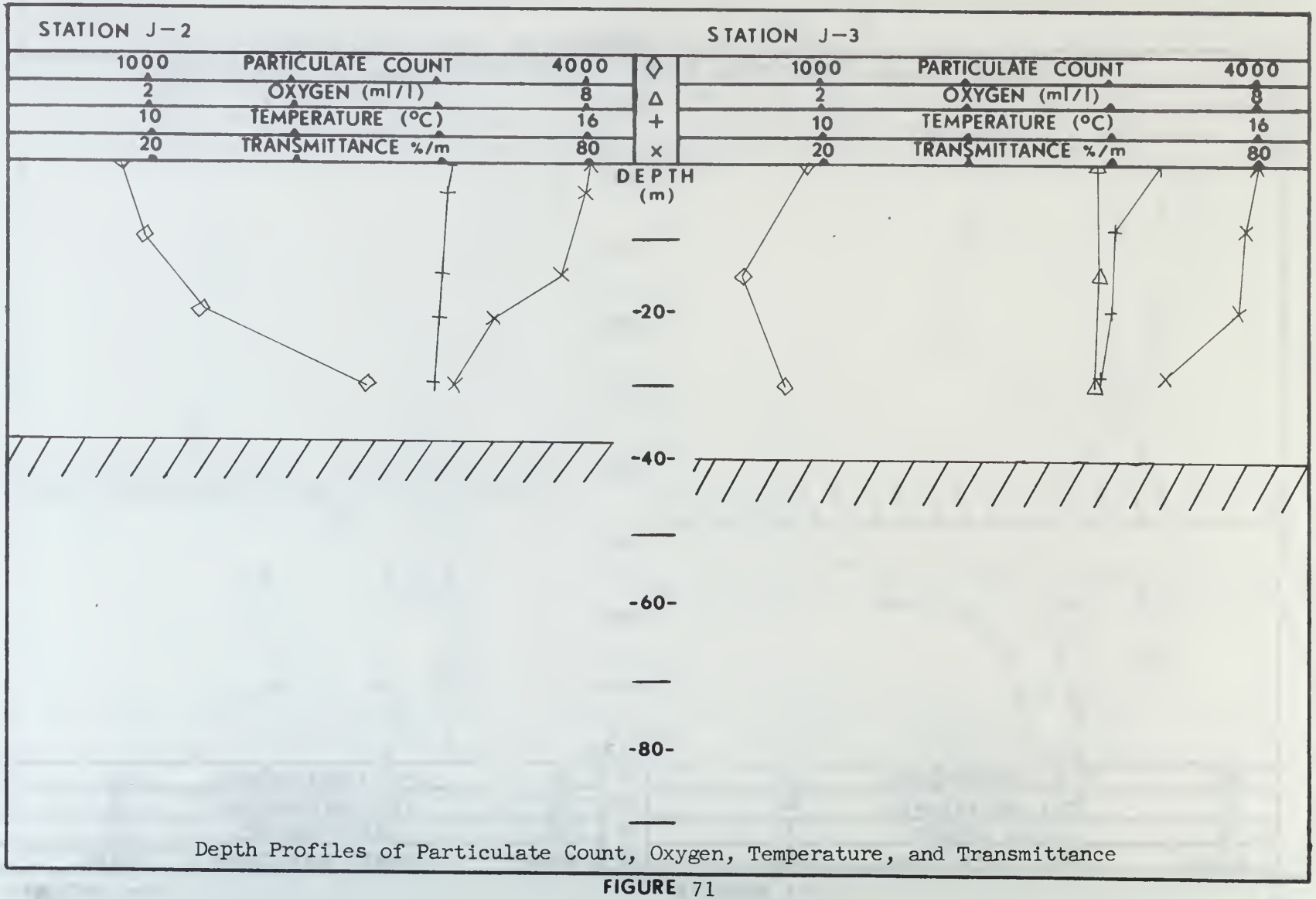

STATION I–7
STATION I–8
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◊
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 69



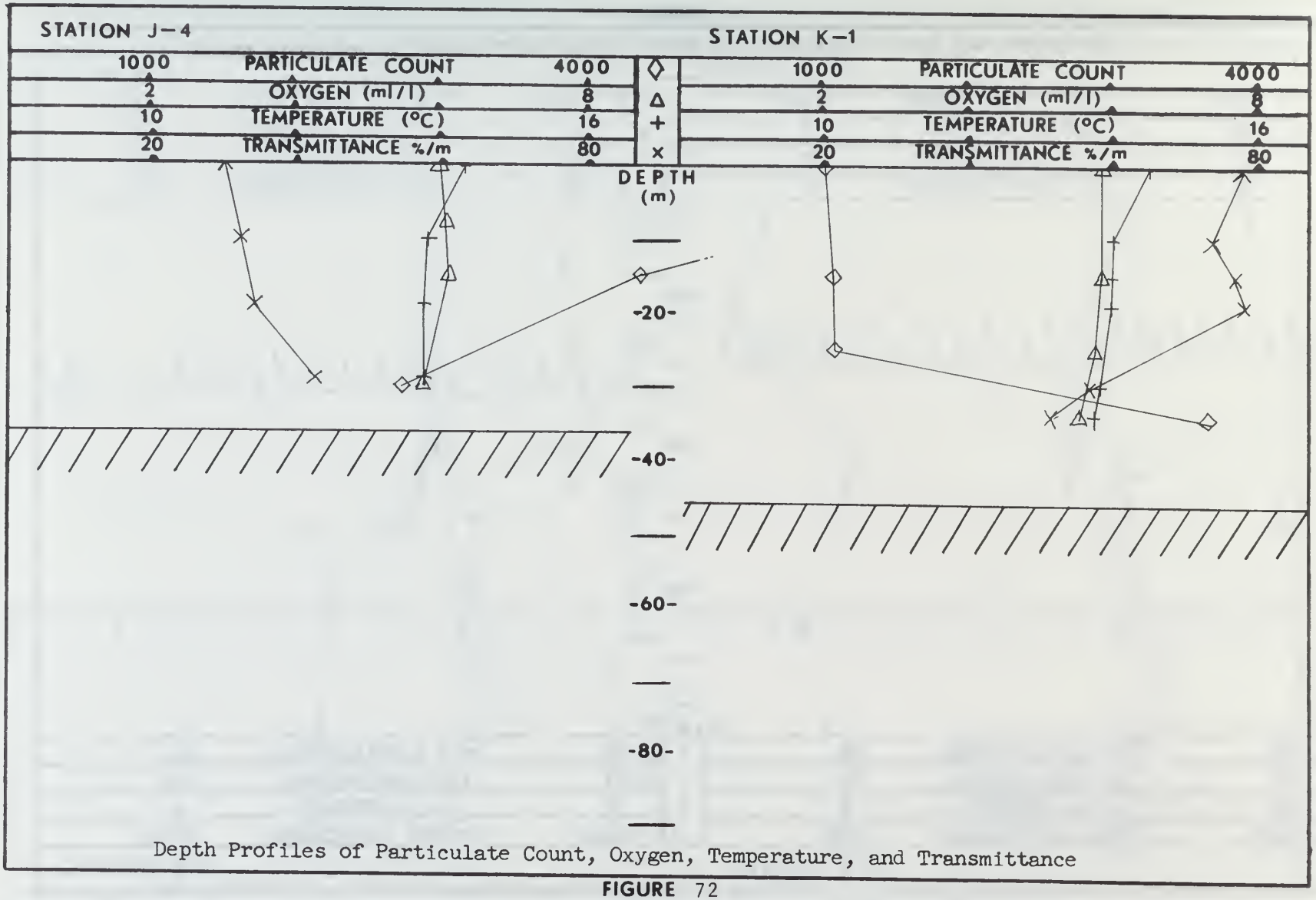

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 70



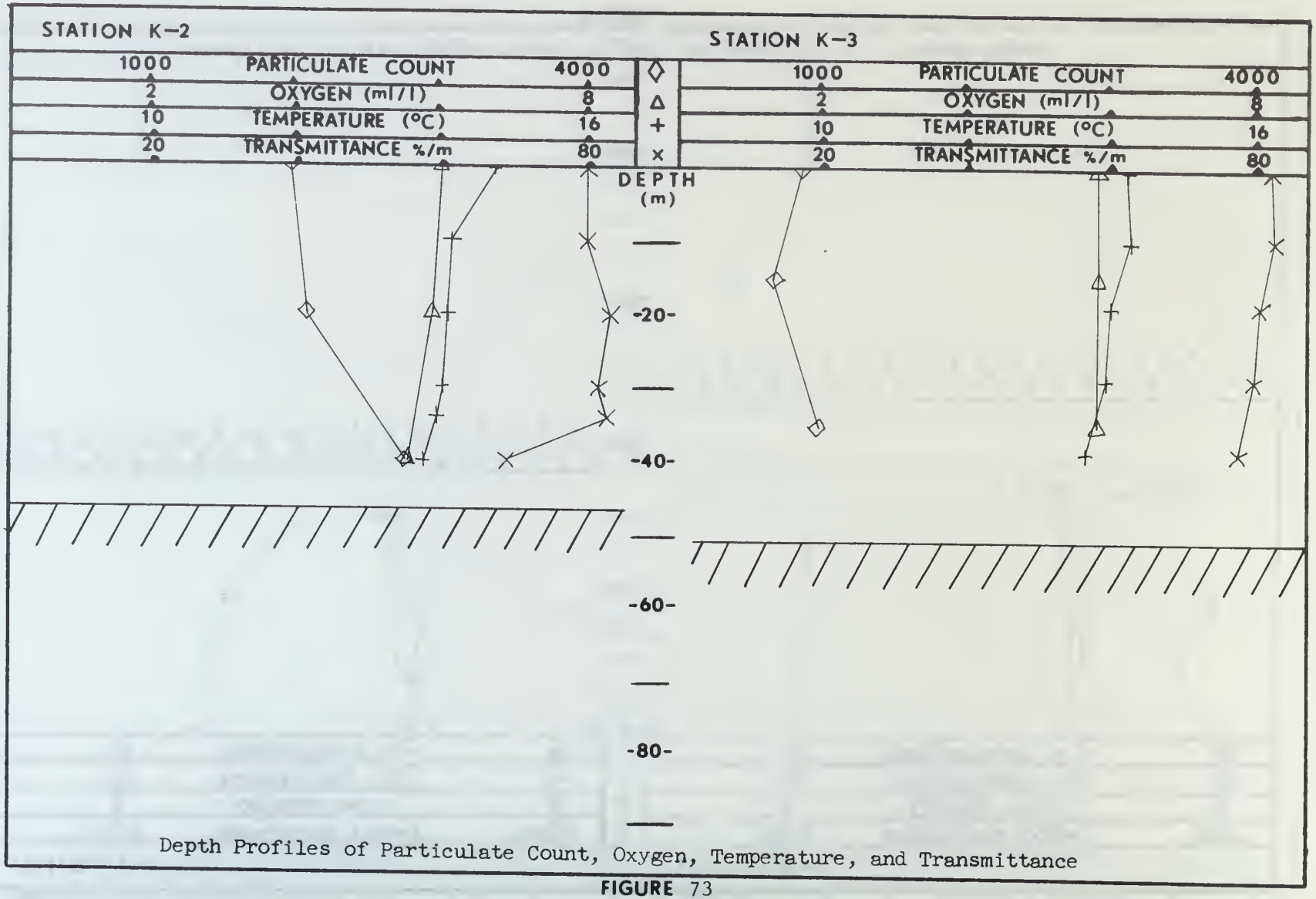

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 71



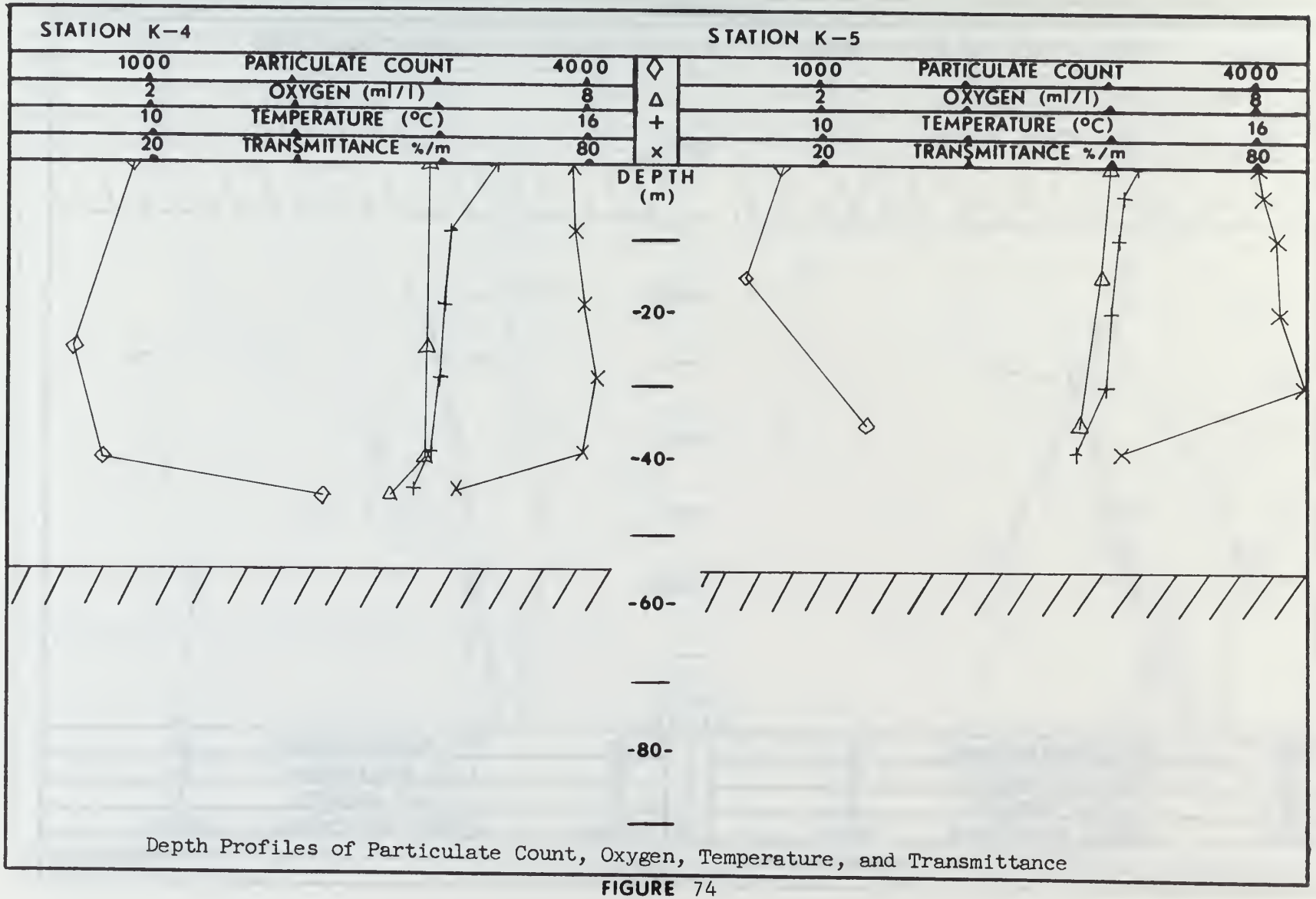

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 72



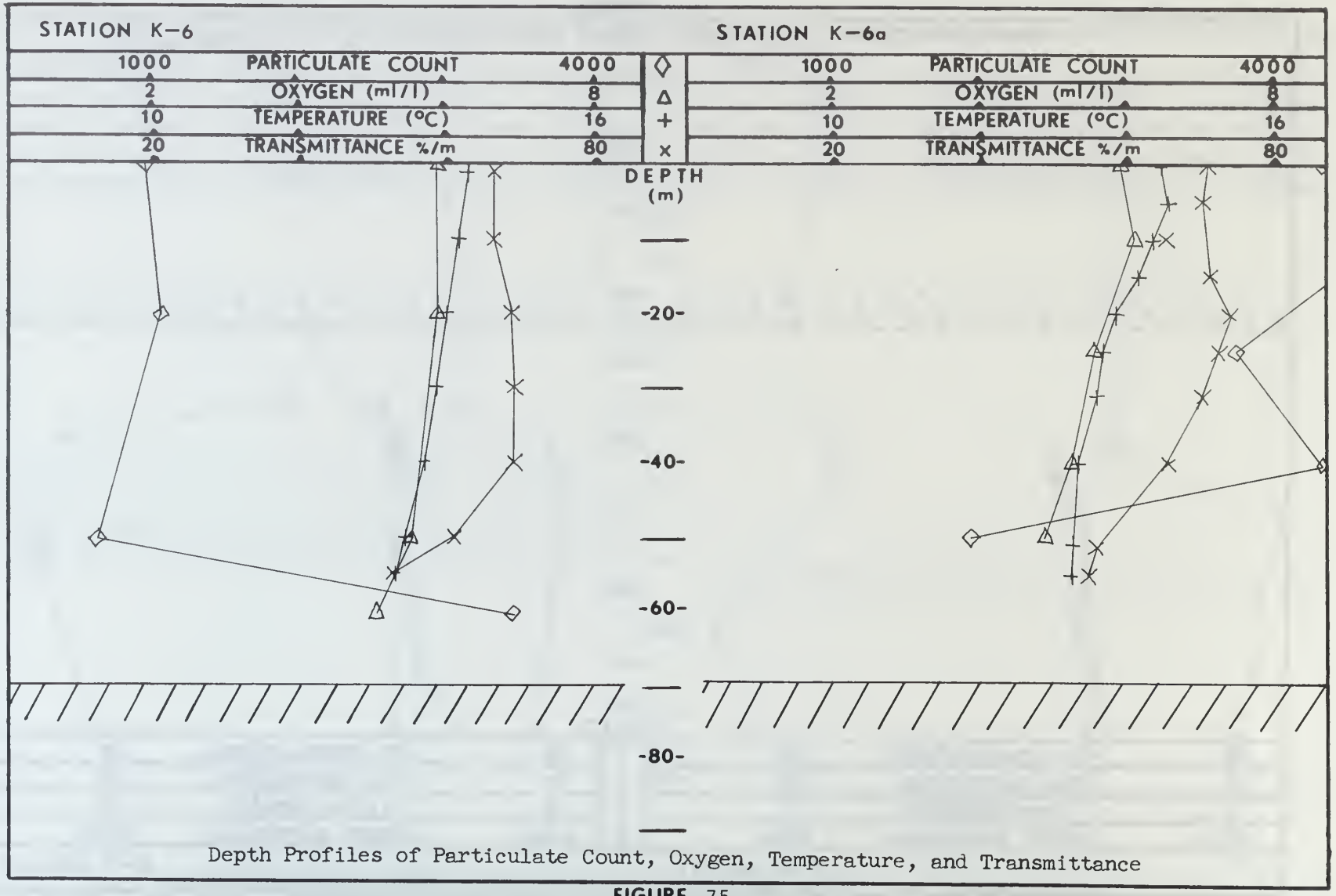

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 73



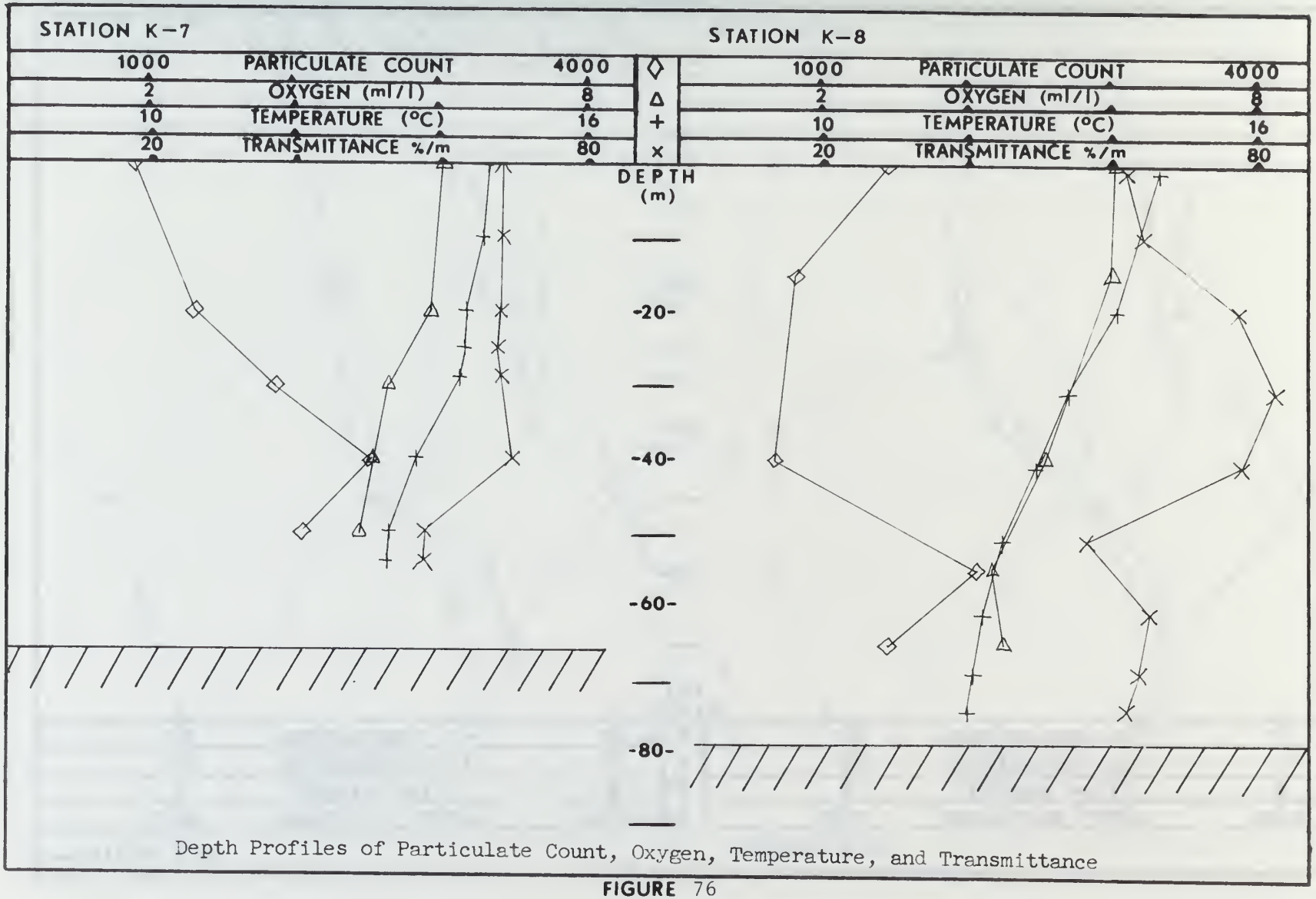

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 74




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 75




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 76

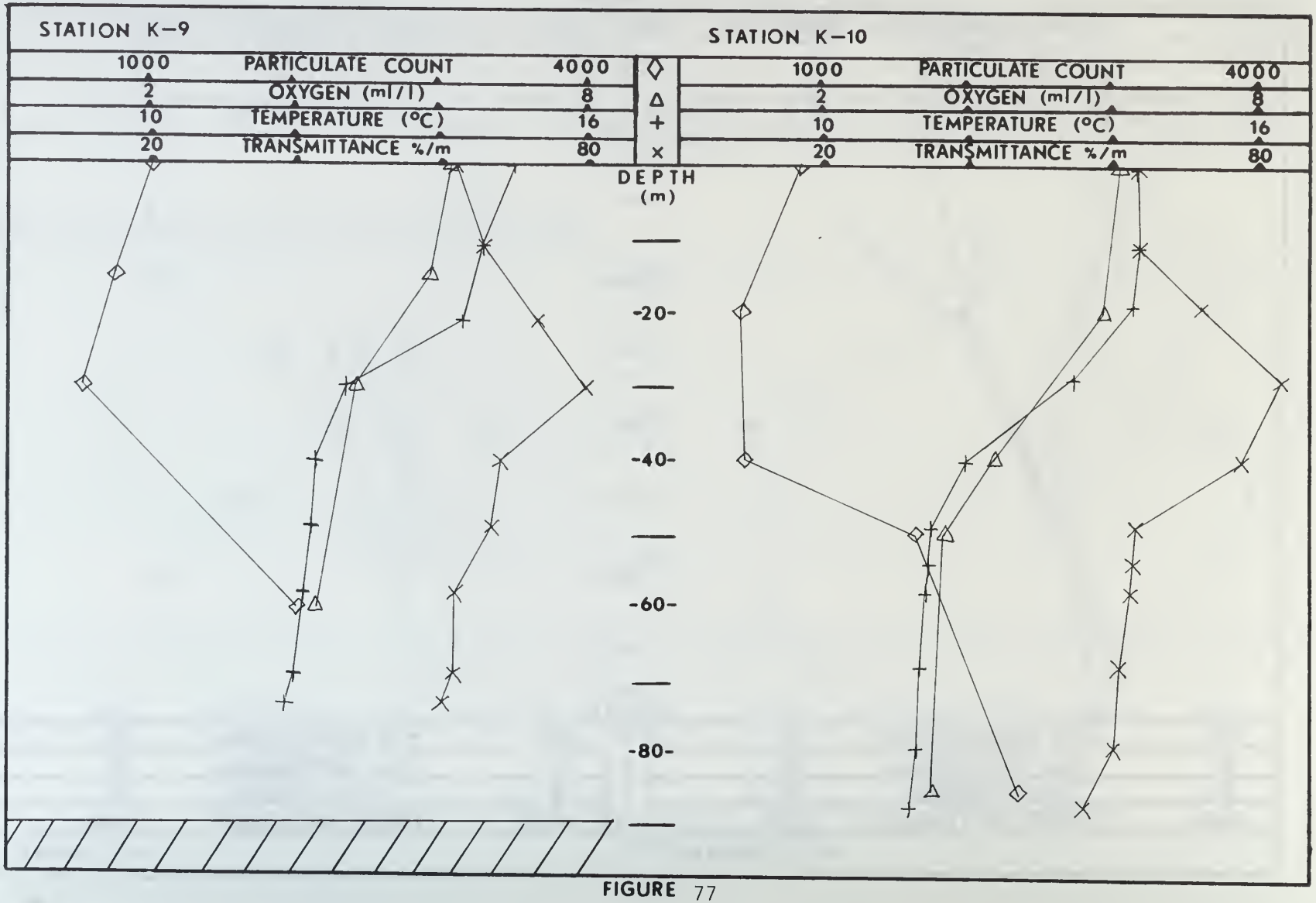

STATION K–9
STATION K–10
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◇
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 77

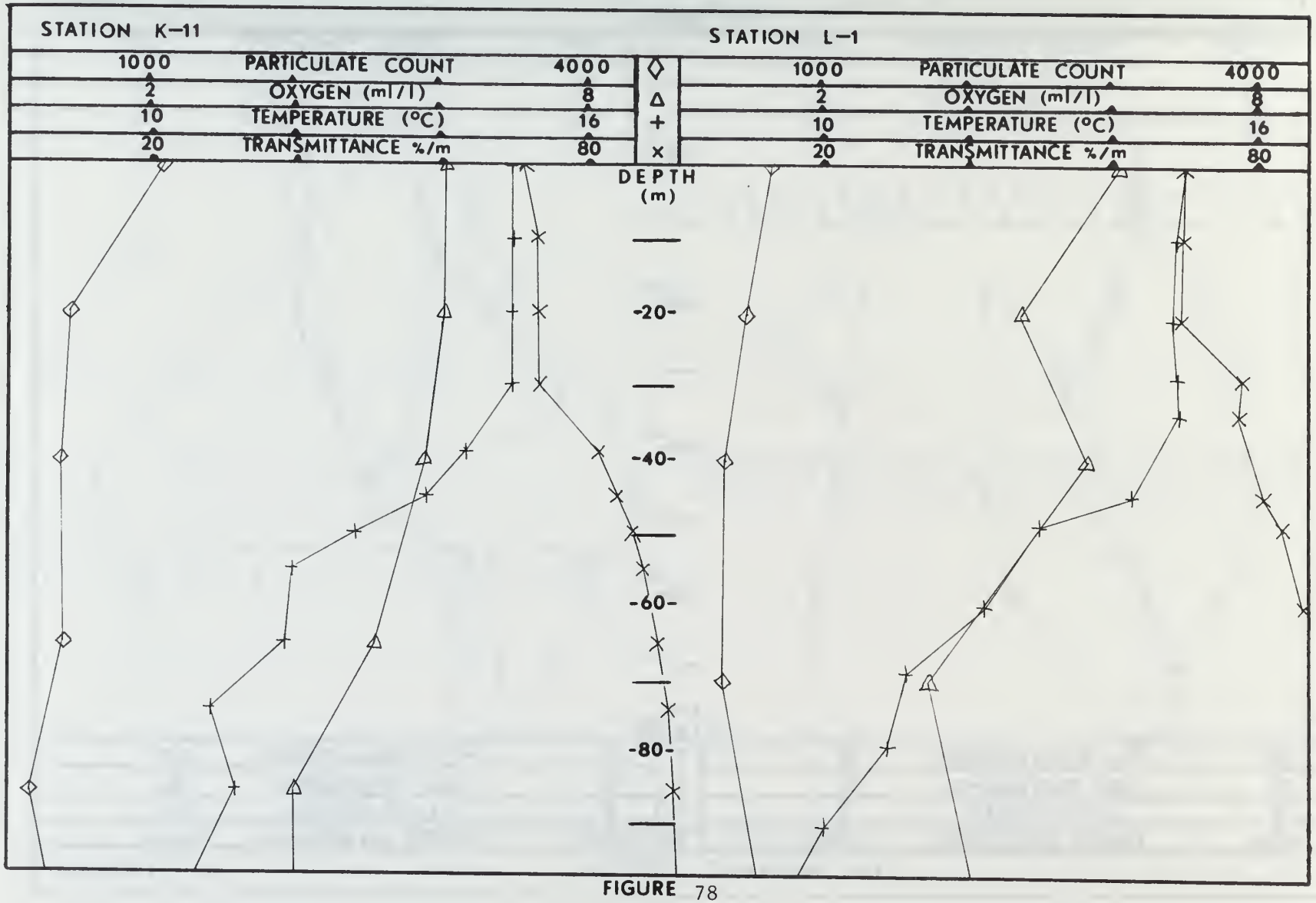

STATION K–11
STATION L–1
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◊
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 78

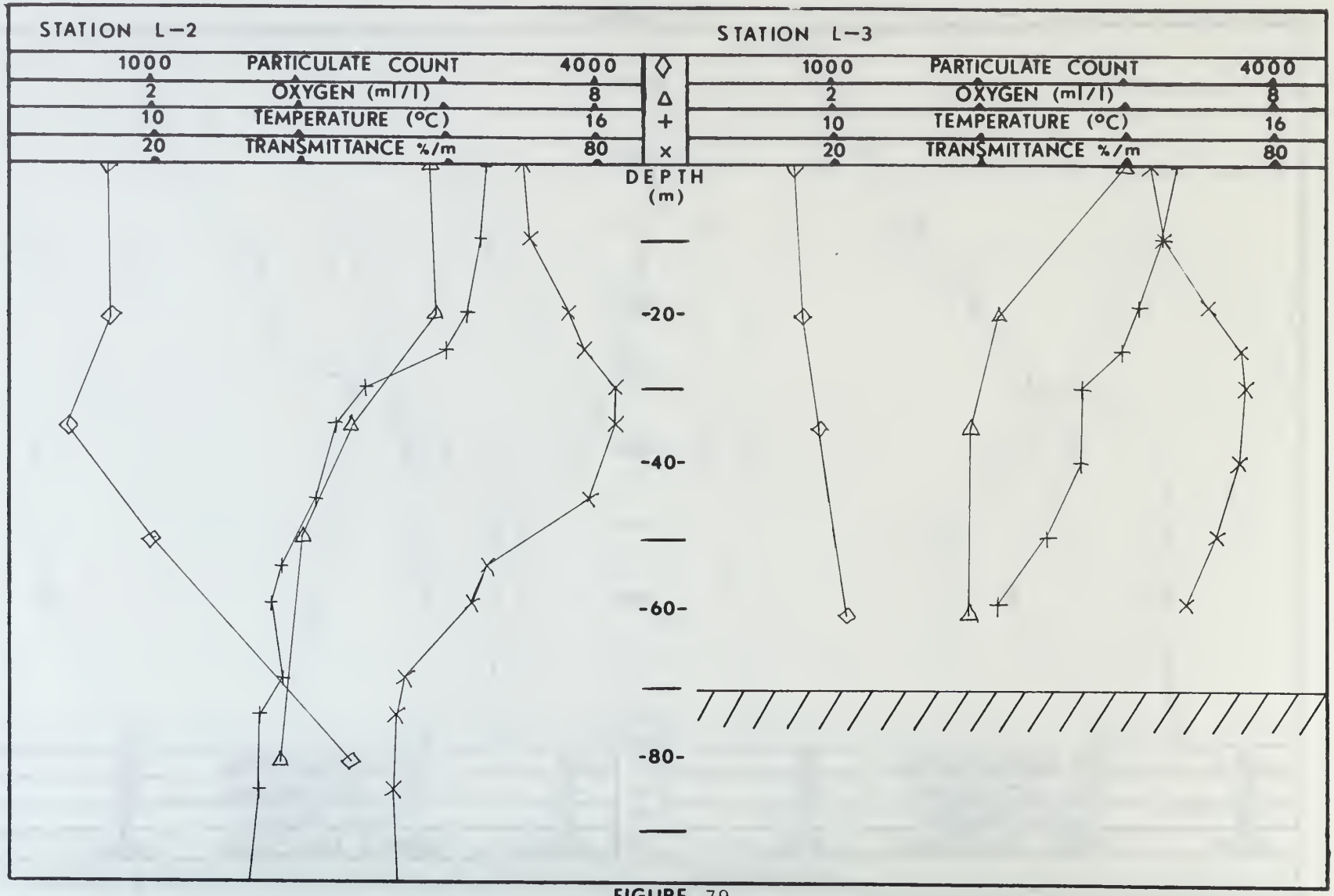
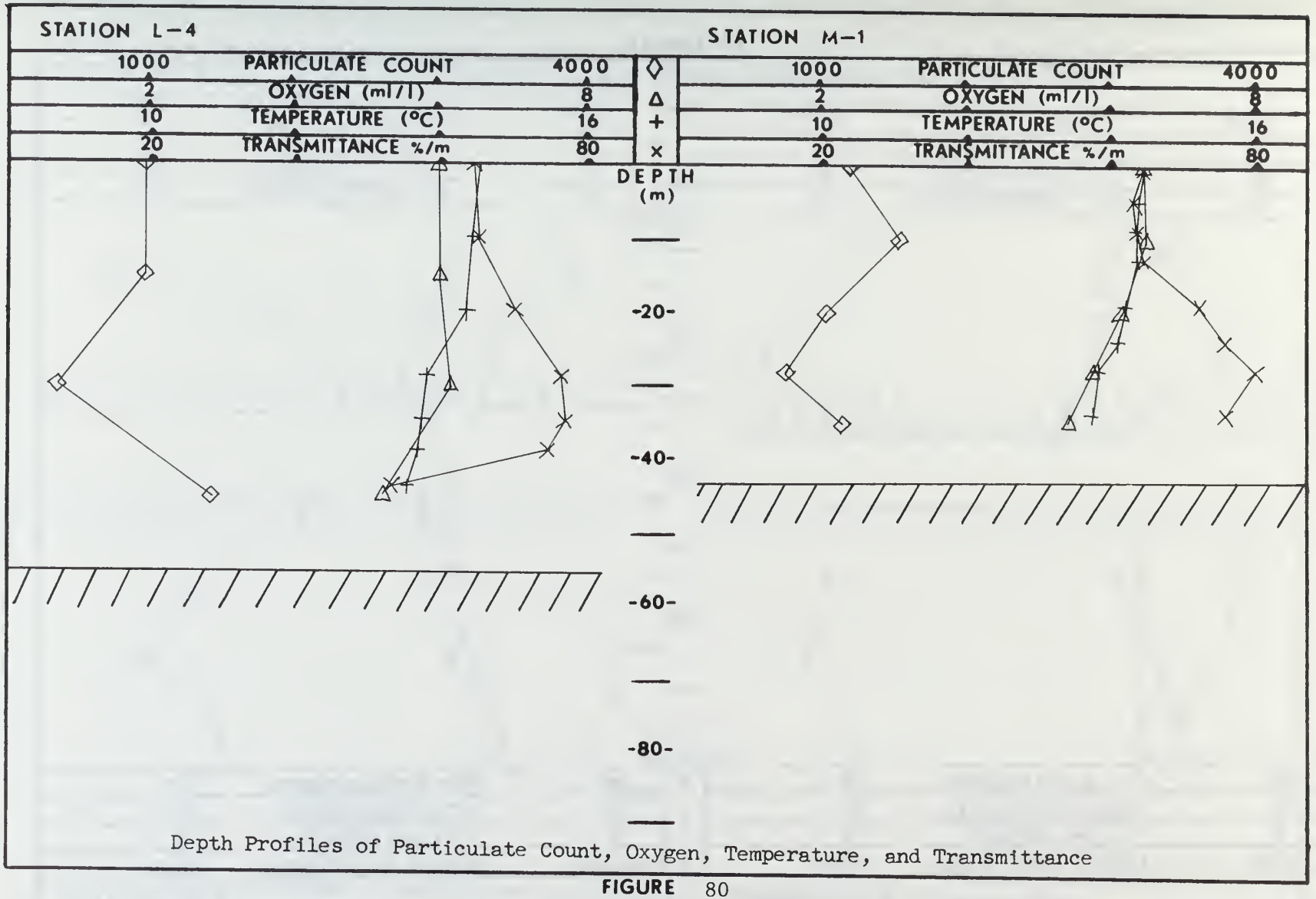
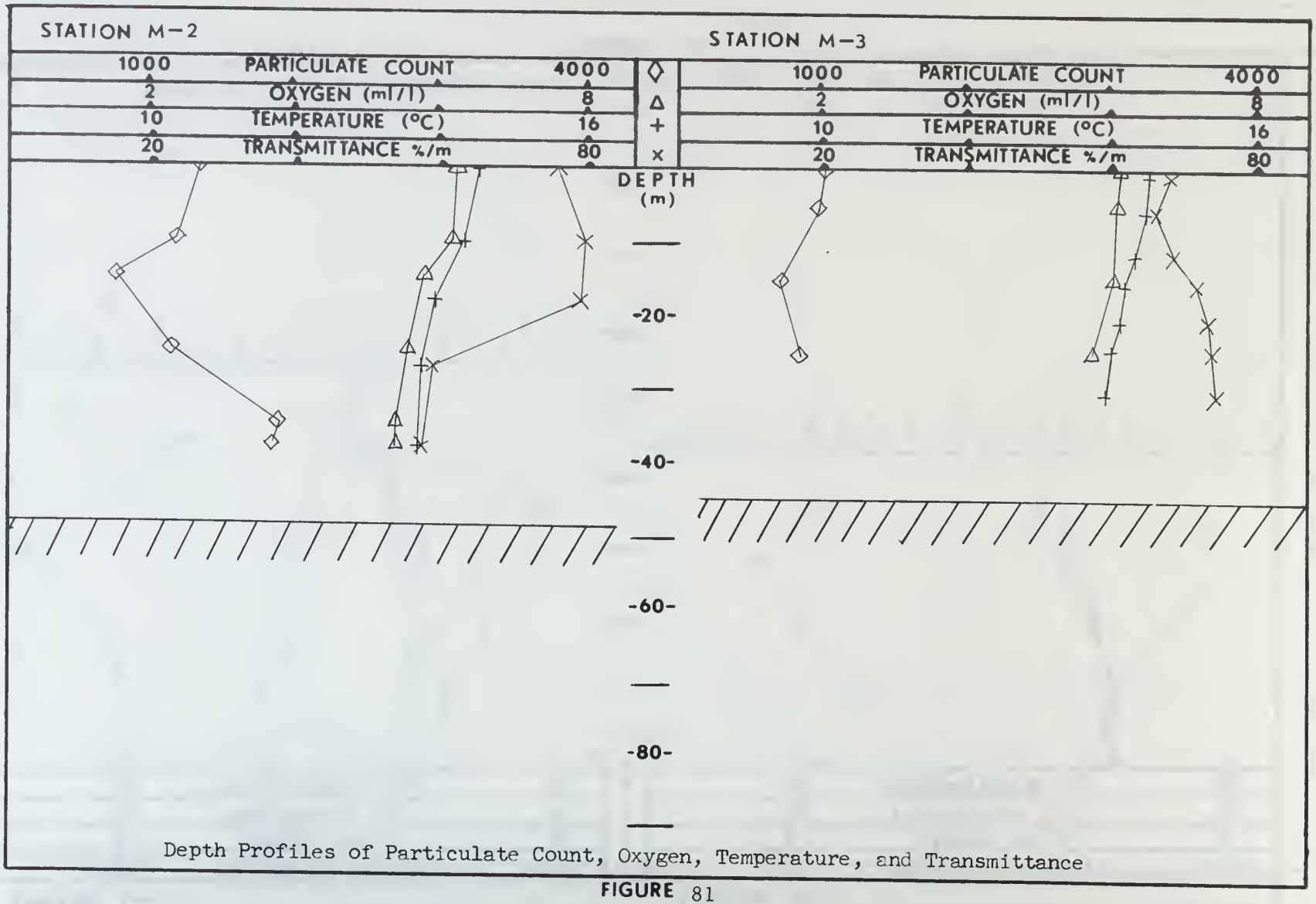

STATION L-2
STATION L-3
1000 PARTICULATE COUNT 4000
2 OXYGEN (ml/l) 8
10 TEMPERATURE (°C) 16
20 TRANSMITTANCE %/m 80
◇
Δ
+
×
DEPTH (m)
-20-
-40-
-60-
-80-

FIGURE 79



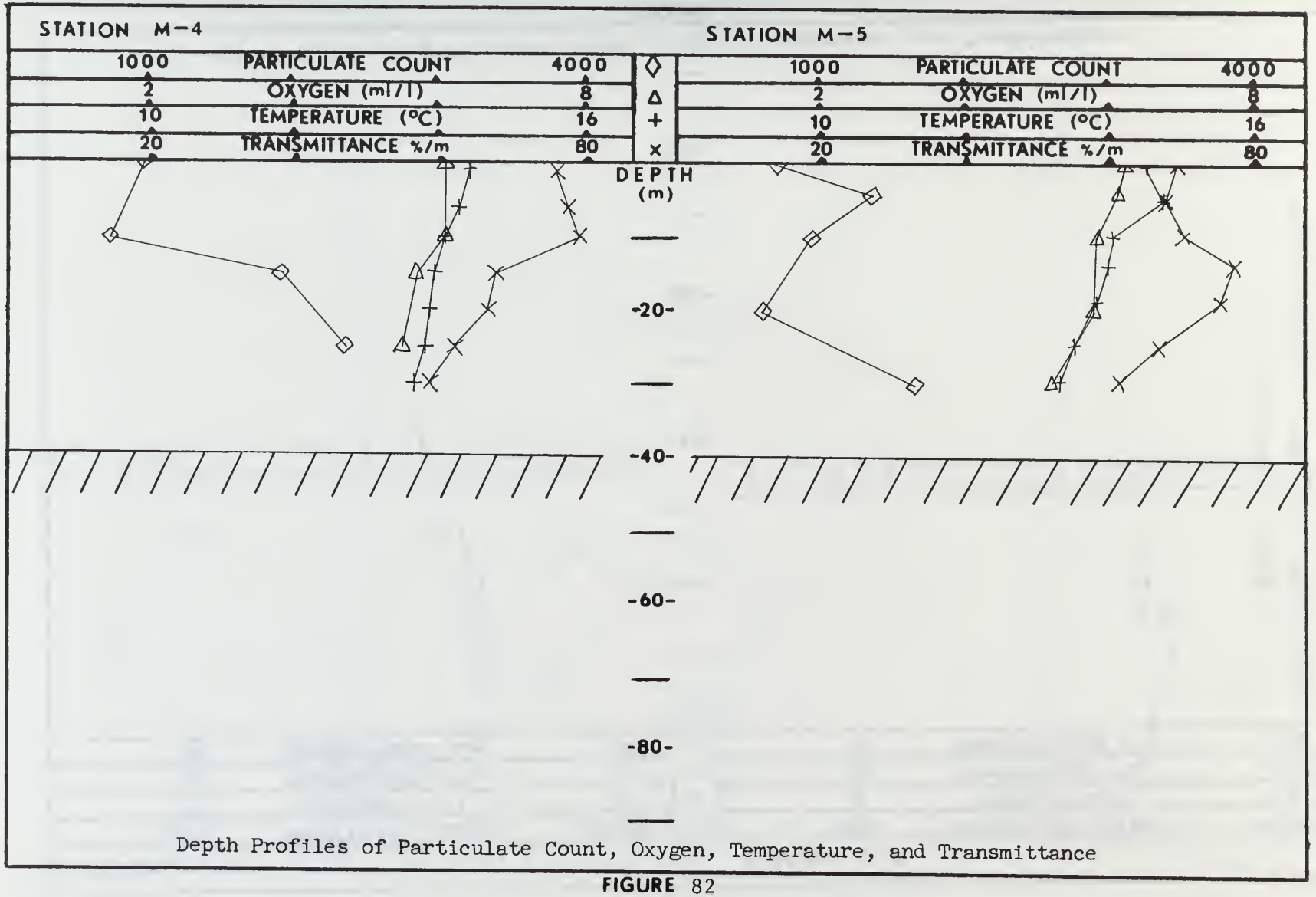

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 80



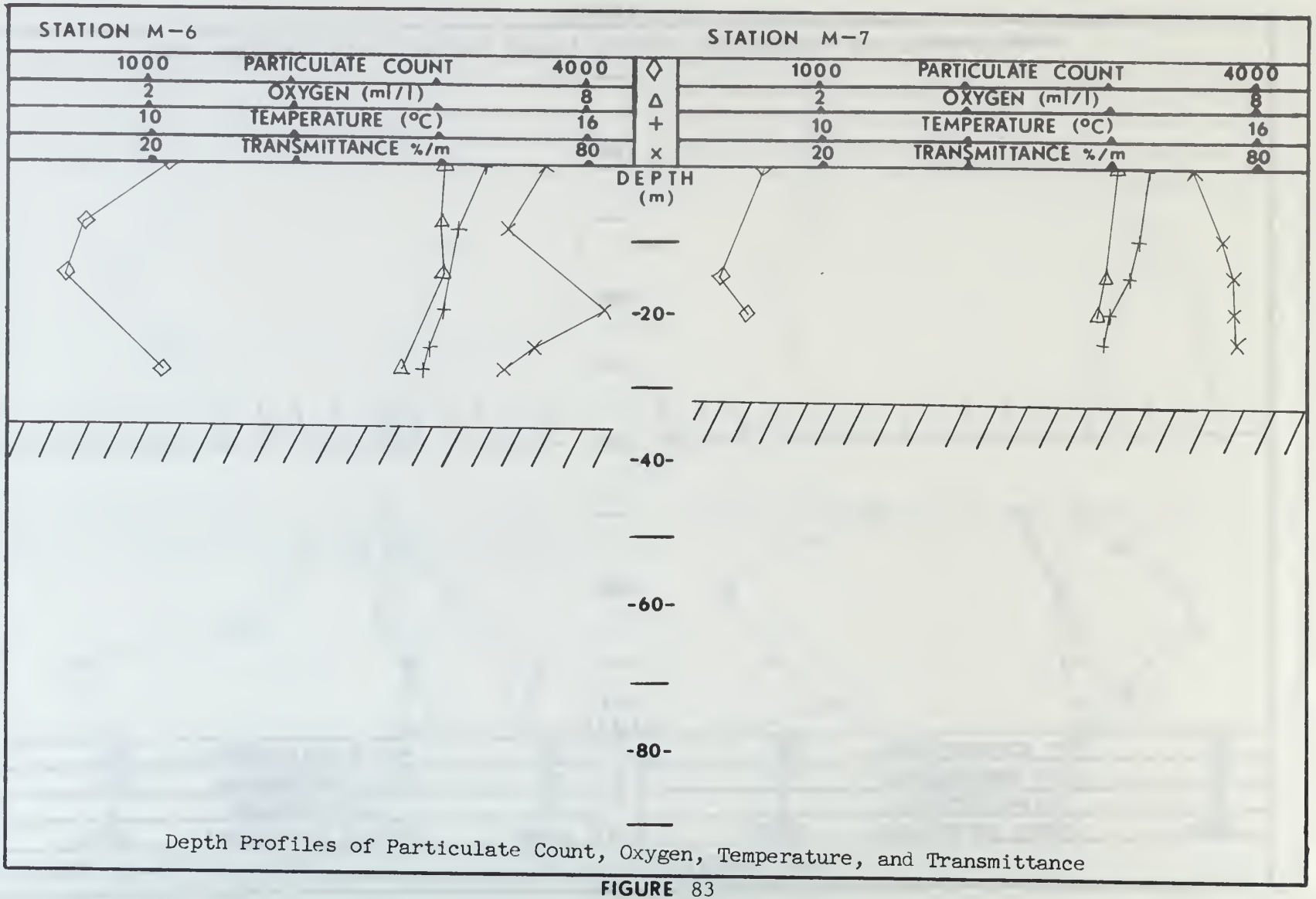

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 81




Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

**FIGURE** 82

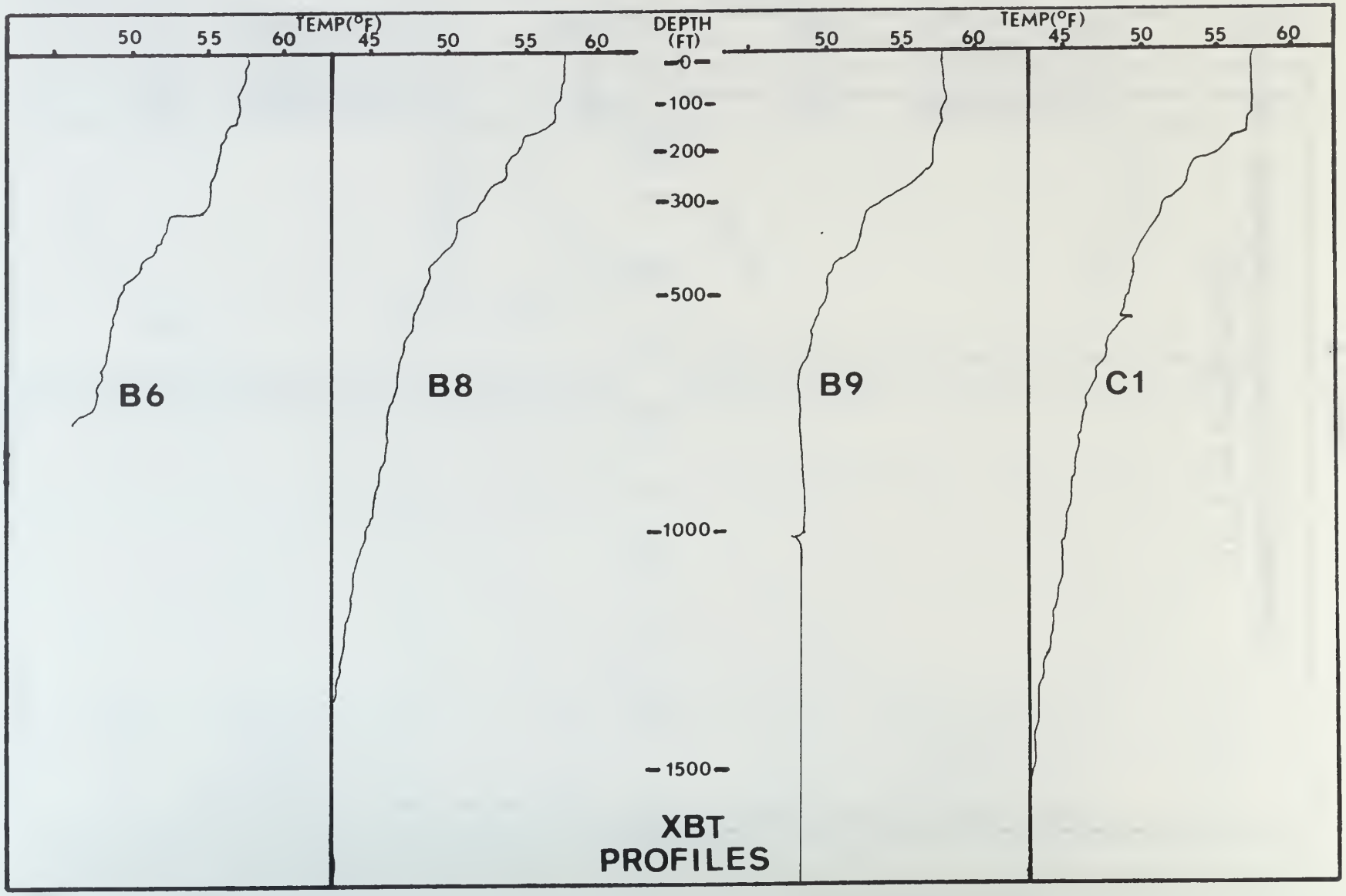


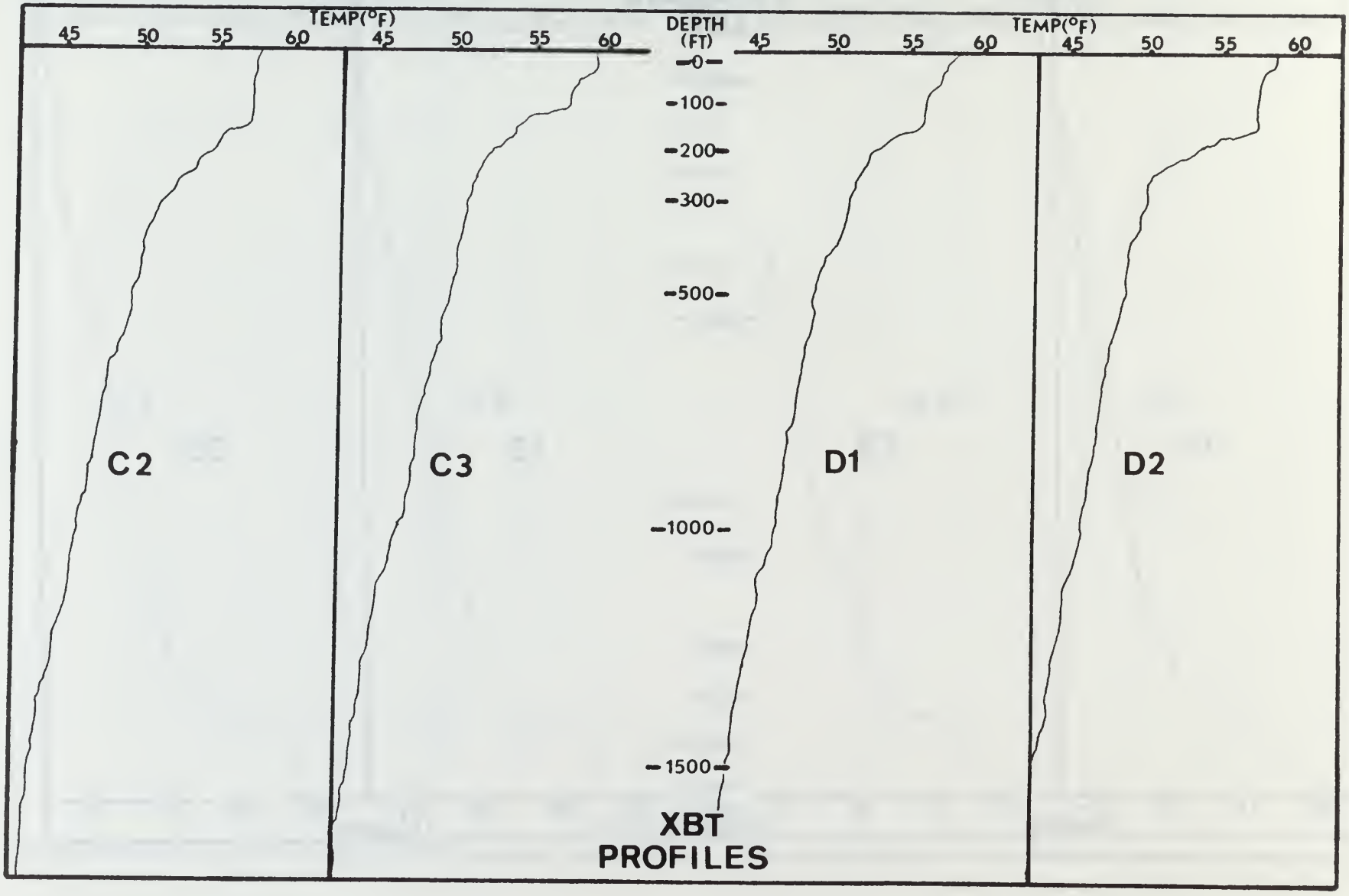

Depth Profiles of Particulate Count, Oxygen, Temperature, and Transmittance

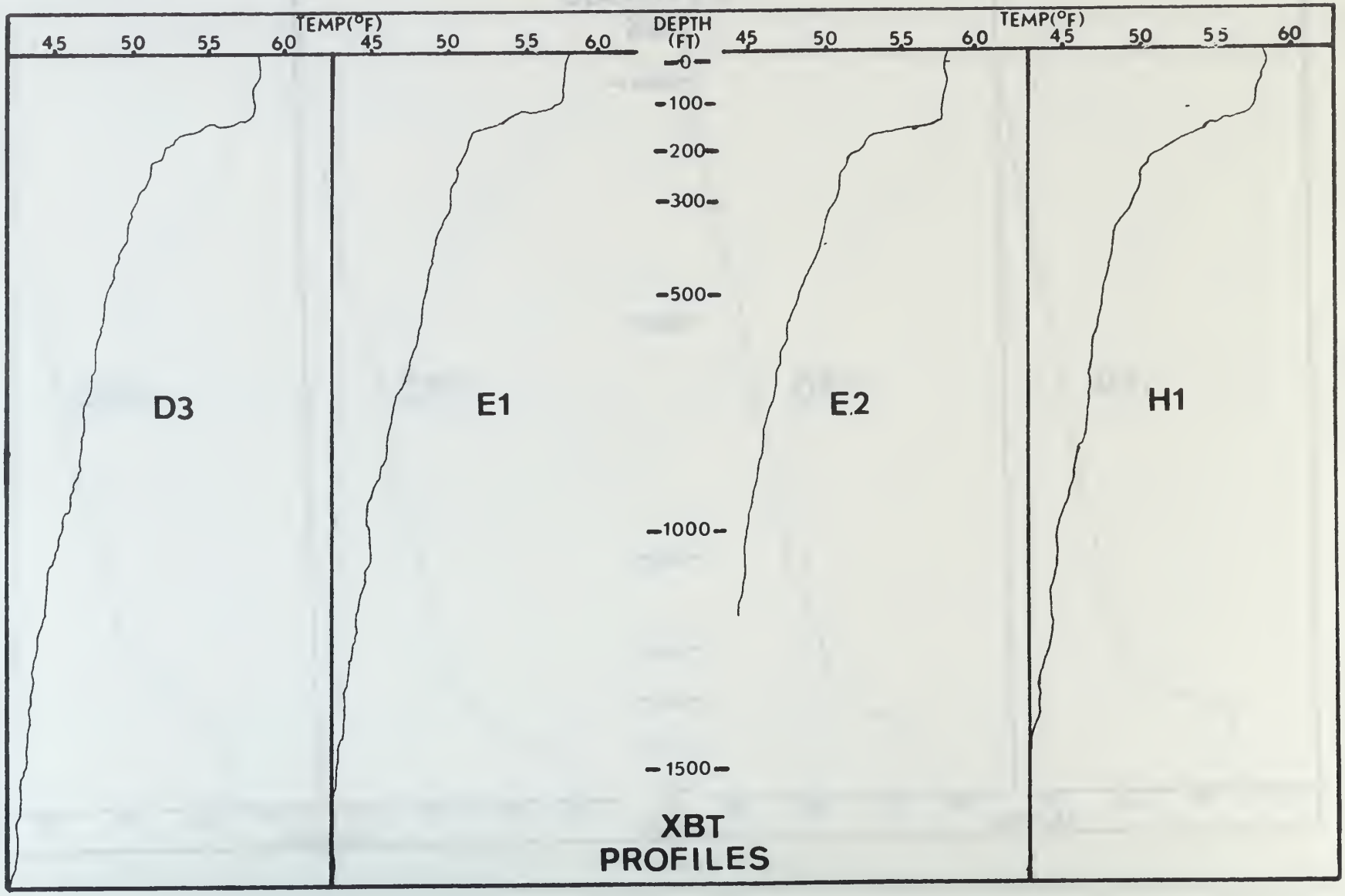
**FIGURE** 83

# APPENDIX X

BATHYTHERMOGRAPH TRACES WITH TEMPERATURES
IN $^{o}$F AND DEPTHS IN FEET


TEMP(°F)
50
55
60
45
50
55
60
DEPTH
(FT)
0
100
200
300
500
1000
1500
B6
B8
B9
C1
XBT
PROFILES


TEMP(°F)
45
50
55
60
DEPTH (FT)
0
100
200
300
500
1000
1500
C2
C3
D1
D2
XBT PROFILES


TEMP(°F)
4.5
5.0
5.5
6.0
DEPTH (FT)
0
100
200
300
500
1000
1500
D3
E1
E2
H1
XBT PROFILES

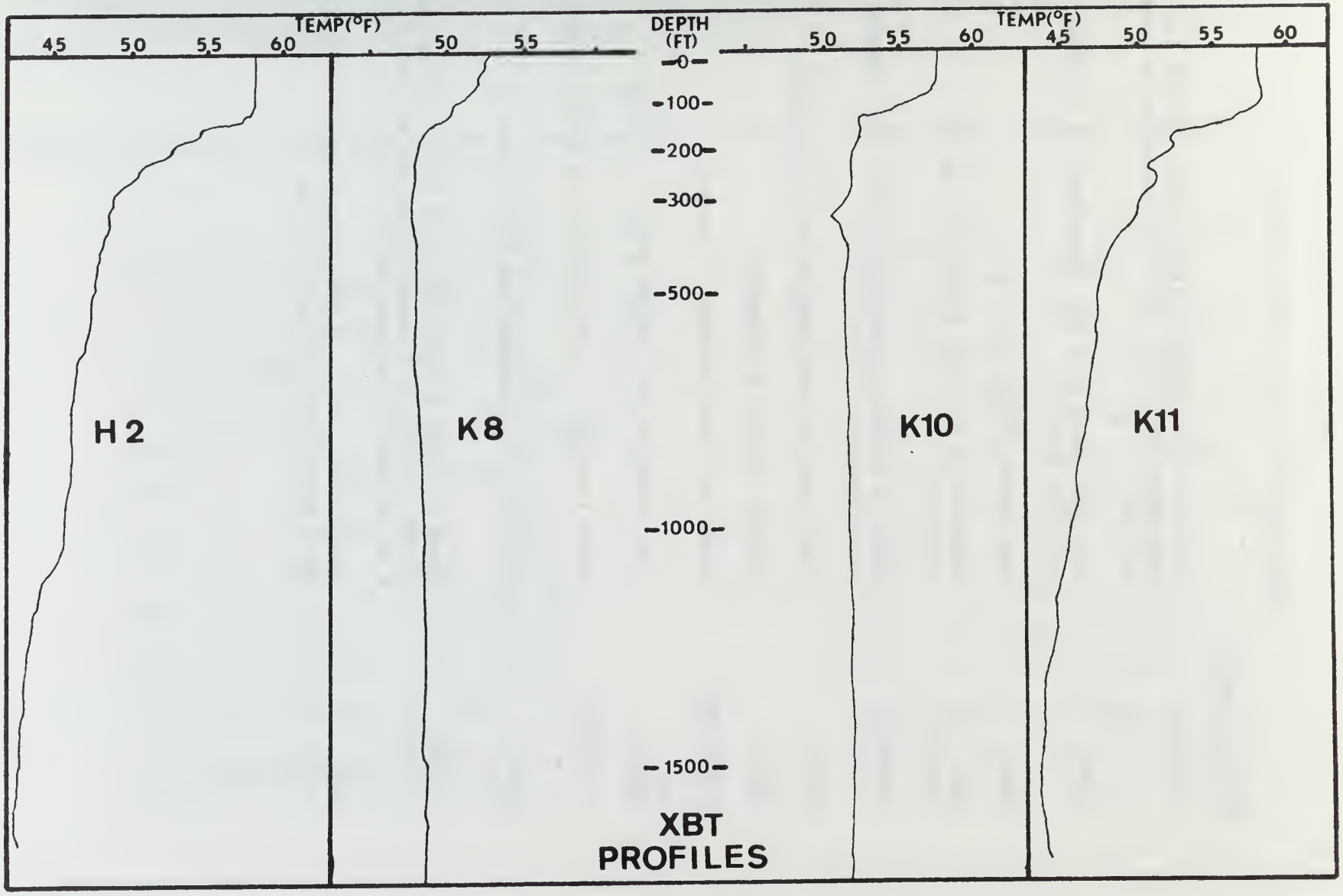

TEMP(°F)
4.5
5.0
5.5
6.0
5.0
5.5
DEPTH (FT)
0
100
200
300
500
1000
1500
TEMP(°F)
5.0
5.5
6.0
4.5
5.0
5.5
6.0
H 2
K 8
K10
K11
XBT PROFILES

TABLE 1

EXPLANATION OF DATA RECORD HEADINGS

Observed Data:

| | |
|---|---|
| STATION: | Indicates the chronological order in which the stations were taken, with the exception of K-6a and K-7. |
| TIME: | The local time when the messenger was released to trip the cast. |
| DATE: | Day, month, year. |
| LAT:<br>LONG: | Position of the ship during the period of observation. |
| SOUNDING: | Depth in meters as determined from echo sounder observations. |
| WIND: | True direction and speed reported in knots. |
| BARO: | Reading of ship's barometer. |
| CLOUD AMT: | Amount of cloud coverage in tenths. |
| SEA:<br>SWELL: | True direction and height given in feet. |
| Z (DEPTH)<br>m | Depth in meters as determined from SV/T/D probe. |
| TEMP:<br>$C^{o}$ | Temperatures observed from SV/T/D probe. |
| SO VEL:<br>m/sec | Speed of sound as measured with SV/T/D probe in meters per second. These values are all low by a value equal to approximately 3 m/sec. |
| TRAN:<br>%/m | Beam transmittance in percent per meter for a one meter path and a wratten 61 filter. |

TABLE 1

Station Data: Depth, Date, Time, Location, Weather, Sound Velocity, Temperature, and Beam Transmittance

STATION: A-1 DEPTH: 73 m
DATE: 7-11-69 TIME: 1300
LAT: 36°-39.2' LONG: 121°-54.2'
WIND DIR: 165° SPEED: 18
AIR TEMP(DRY): 62° BARO: 29.86
CLOUD AMT: 10 HEIGHT(FT): 1000
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 101 | 1.0 | 1499.7 | 13.40 | 55.3 |
| 101 | 3.0 | 1499.7 | 13.40 | 54.9 |
| 101 | 6.0 | 1499.7 | 14.38 | 55.2 |
| 101 | 10.0 | 1499.5 | 14.29 | 0.0 |

* RELATIVE VALUES ONLY

STATION: A-2 DEPTH: 85 m
DATE: 7-11-69 TIME: 1700
LAT: 36°-40.8' LONG: 121°-54.2'
WIND DIR: 180° SPEED: 16
AIR TEMP(DRY): 60° BARO: 29.86
CLOUD AMT: 10 HEIGHT(FT): 1000
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 102 | 1.0 | 1500.1 | 14.69 | 59.8 |
| 102 | 6.0 | 1500.2 | 14.54 | 60.1 |
| 102 | 10.0 | 1500.2 | 14.54 | 60.1 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: A-3 DEPTH: 83 m
DATE: 7-11-69 TIME: 1900
LAT: 36°-42.5' LONG: 121°-54.0'
WIND DIR: 090° SPEED: 10
AIR TEMP(DRY): 58° BARO: 29.86
CLOUD AMT: 10 HEIGHT(FT): 1000
SEA: - SWELL: 270°-4

| STA | Z (M) | SQ VEL (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 103 | 0.0 | 1499.2 | 14.28 | 65.2 |
| 103 | 5.0 | 1499.4 | 14.28 | 65.2 |
| 103 | 10.0 | 1499.5 | 14.28 | 65.1 |
| 103 | 15.0 | 1499.5 | 14.28 | 65.2 |
| 103 | 25.0 | 1499.6 | 14.25 | 65.5 |
| 103 | 35.0 | 1499.3 | 14.14 | 65.7 |
| 103 | 45.0 | 1498.6 | 13.80 | 72.0 |
| 103 | 50.0 | 1498.1 | 13.66 | 75.3 |
| 103 | 55.0 | 1498.1 | 13.62 | 76.2 |
| 103 | 60.0 | 1498.1 | 13.60 | 76.5 |
| 103 | 70.0 | 1497.8 | 13.45 | 78.8 |

- RELATIVE VALUES ONLY

STATION: A-4 DEPTH: 86 m
DATE: 7-11-69 TIME: 2100
LAT: 36°-43.9' LONG: 121°-54.2'
WIND DIR: 090° SPEED: 10
AIR TEMP(DRY): 58° BARO: 29.86
CLOUD AMT: 10 HEIGHT(FT): 1000
SEA: - SWELL: 270°-4

| STA | Z (M) | SQ VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 104 | 0.0 | 1499.2 | 14.25 | 65.5 |
| 104 | 5.0 | 1499.3 | 14.25 | 65.7 |
| 104 | 9.0 | 1499.3 | 14.25 | 65.6 |
| 104 | 14.0 | 1499.2 | 14.20 | 65.5 |
| 104 | 24.0 | 1498.9 | 13.95 | 64.3 |
| 104 | 34.0 | 1497.9 | 13.65 | 65.3 |
| 104 | 44.0 | 1497.7 | 13.56 | 70.0 |
| 104 | 54.0 | 1497.7 | 13.49 | 74.9 |
| 104 | 64.0 | 1497.6 | 13.41 | 77.7 |
| 104 | 74.0 | 1497.2 | 13.25 | 15.0 |

RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: A-5 DEPTH: 202 m
DATE: 7-11-69 TIME: 2300
LAT: 36°-45.4' LONG: 121°-54.3'
WIND DIR: 090° SPEED: 18
AIR TEMP(DRY): 52° BARO: 29.82
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: 090°-4 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 105 | 2.0 | 1498.8 | 14.16 | 67.3 |
| 105 | 10.0 | 1499.0 | 14.15 | 67.3 |
| 105 | 20.0 | 1499.0 | 14.08 | 65.9 |
| 105 | 30.0 | 1497.9 | 13.71 | 66.0 |
| 105 | 41.0 | 1497.9 | 13.64 | 67.0 |
| 105 | 50.0 | 1497.5 | 13.46 | 72.2 |
| 105 | 60.0 | 1497.6 | 13.46 | 73.7 |
| 105 | 71.0 | 1497.7 | 13.43 | 75.8 |
| 105 | 80.0 | 1497.7 | 13.39 | 77.1 |
| 105 | 90.0 | 1497.4 | 13.50 | 39.1 |
| 105 | 95.0 | 1497.2 | 13.13 | 29.3 |
| 105 | 101.0 | 1493.6 | 12.06 | 49.3 |

RELATIVE VALUES ONLY

STATION: A-6 DEPTH: 348 m
DATE: 8-11-69 TIME: 0100
LAT: 36°-42.5' LONG: 121°-54.4'
WIND DIR: 090° SPEED: 18
AIR TEMP(DRY): 55° BARO: 29.75
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: 090°-4 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 106 | 1.0 | 1498.4 | 14.05 | 68.7 |
| 106 | 6.0 | 1498.6 | 14.05 | 69.1 |
| 106 | 15.0 | 1497.7 | 13.79 | 67.5 |
| 106 | 22.0 | 1497.6 | 13.66 | 68.1 |
| 106 | 32.0 | 1497.7 | 13.64 | 68.8 |
| 106 | 41.0 | 1497.4 | 13.48 | 75.3 |
| 106 | 46.0 | 1497.4 | 13.46 | 75.7 |
| 106 | 54.0 | 1497.4 | 13.42 | 76.0 |
| 106 | 57.0 | 1497.3 | 13.41 | 78.3 |
| 106 | 69.0 | 1497.3 | 13.35 | 77.2 |
| 106 | 80.0 | 1497.4 | 13.32 | 75.4 |
| 106 | 82.0 | 1497.5 | 13.33 | 74.8 |
| 106 | 84.0 | 1497.5 | 13.28 | 67.2 |
| 106 | 96.0 | 1497.5 | 13.26 | 65.0 |

TABLE 1 (Cont.)

STATION: A-7 DEPTH: --
DATE: 8-11-69 TIME: 0300
LAT: 36°-48.2' LONG: 121°-54.3'
WIND DIR: 100° SPEED: 15
AIR TEMP(DRY): 58° BARO: 29.71
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 107 | 2.0 | 1498.3 | 13.97 | 67.9 |
| 107 | 9.0 | 1498.4 | 13.99 | 68.2 |
| 107 | 17.0 | 1497.9 | 13.88 | 69.7 |
| 107 | 26.0 | 1497.4 | 13.59 | 71.4 |
| 107 | 32.0 | 1497.4 | 13.59 | 72.3 |
| 107 | 40.0 | 1497.6 | 13.57 | 75.4 |
| 107 | 46.0 | 1497.4 | 13.50 | 75.4 |
| 107 | 55.0 | 1497.4 | 13.47 | 76.5 |
| 107 | 64.0 | 1497.3 | 13.36 | 73.0 |
| 107 | 66.0 | 1497.2 | 13.35 | 77.4 |
| 107 | 70.0 | 1497.3 | 13.35 | 77.6 |
| 107 | 77.0 | 1497.5 | 13.35 | 77.7 |
| 107 | 84.0 | 1497.4 | 13.29 | 54.3 |
| 107 | 98.0 | 1497.4 | 13.20 | 67.1 |

STATION: A-8 DEPTH: 68 m
DATE: 8-11-69 TIME: 0500
LAT: 36°-48.8' LONG: 121°-54.4'
WIND DIR: 090° SPEED: 25
AIR TEMP(DRY): 58° BARO: 29.72
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 108 | 0.0 | 1497.1 | 13.94 | 69.3 |
| 108 | 9.0 | 1498.3 | 13.95 | 69.4 |
| 108 | 19.0 | 1498.0 | 13.80 | 70.3 |
| 108 | 29.0 | 1497.5 | 13.57 | 72.9 |
| 108 | 34.0 | 1497.5 | 13.53 | 73.9 |
| 108 | 44.0 | 1497.2 | 13.41 | 69.7 |
| 108 | 48.0 | 1497.3 | 13.40 | 76.8 |
| 108 | 56.0 | 1497.3 | 13.35 | 71.5 |
| 108 | 60.0 | 1497.0 | 13.28 | 70.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: A-9 DEPTH: 46 m
DATE: 8-11-69 TIME: 0630
LAT: 36°-51.1' LONG: 121°-54.3'
WIND DIR: 090° SPEED: 25
AIR TEMP(DRY): 58° BARO: 29.72
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 109 | 0.0 | 1498.0 | 13.88 | 70.0 |
| 109 | 4.0 | 1498.0 | 13.88 | 70.2 |
| 109 | 13.0 | 1498.2 | 13.87 | 69.6 |
| 109 | 23.0 | 1497.9 | 13.74 | 69.3 |
| 109 | 28.0 | 1497.7 | 13.60 | 74.8 |
| 109 | 34.0 | 1496.8 | 13.35 | 72.9 |
| 109 | 38.0 | 1496.7 | 13.27 | 69.1 |

* RELATIVE VALUES ONLY

STATION: A-10 DEPTH: 35 m
DATE: 8-11-69 TIME: 0800
LAT: 36°-52.6' LONG: 121°-54.3'
WIND DIR: 110° SPEED: 20
AIR TEMP(DRY): 59° BARO: 29.72
CLOUD AMT: 7 HEIGHT(FT): 2500
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 110 | 2.0 | 1497.4 | 13.70 | 69.5 |
| 110 | 5.0 | 1497.4 | 13.70 | 70.1 |
| 110 | 14.0 | 1497.6 | 13.70 | 70.1 |
| 110 | 20.0 | 1497.6 | 13.67 | 67.5 |
| 110 | 24.0 | 1497.6 | 13.65 | 52.7 |
| 110 | 29.0 | 1497.6 | 13.61 | 30.1 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: A-11 DEPTH: 23 m
DATE: 8-11-69 TIME: 0915
LAT: 36°-54.1' LONG: 121°-54.3'
WIND DIR: 110° SPEED: 25
AIR TEMP(DRY): 59° BARO: 29.73
CLOUD AMT: 7 HEIGHT(FT):2000
SEA:110°-4 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 111 | 1.0 | 1497.2 | 13.62 | 55.6 |
| 111 | 4.0 | 1497.2 | 13.60 | 48.3 |
| 111 | 9.0 | 1497.3 | 13.59 | 43.7 |
| 111 | 14.0 | 1497.3 | 13.59 | 47.2 |

* RELATIVE VALUES ONLY

STATION: A-12 DEPTH: 17 m
DATE: 8-11-69 TIME: 1040
LAT:36°-55.6' LONG: 121°-54.5'
WIND DIR: 110° SPEED: 25
AIR TEMP(DRY): 59° BARO: 29.73
CLOUD AMT: 7 HEIGHT(FT):2000
SEA: 110°-4 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 112 | 1.0 | 1498.3 | 13.99 | 11.2 |
| 112 | 5.0 | 1498.2 | 13.95 | 11.9 |
| 112 | 8.0 | 1498.3 | 13.96 | 11.4 |
| 112 | 11.0 | 1498.4 | 13.96 | 11.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-1 DEPTH: 16 m
DATE: 8-11-69 TIME: 1215
LAT: 36°-56.3' LONG: 121°-59.2'
WIND DIR: 110° SPEED: 25
AIR TEMP(DRY): 61° BARO: 29.71
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: 110°-4 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 201 | 1.0 | 1497.9 | 13.87 | 22.9 |
| 201 | 7.0 | 1497.9 | 13.84 | 20.2 |
| 201 | 8.0 | 1497.9 | 13.83 | 11.5 |

* RELATIVE VALUES ONLY

STATION: B-2 DEPTH: 26 m
DATE: 8-11-69 TIME: 1320
LAT: 36°-54.7' LONG: 121°-59.1'
WIND DIR: 100° SPEED: 15
AIR TEMP(DRY): 63° BARO: 29.70
CLOUD AMT: 5 HEIGHT(FT): 2000
SEA: 110°-2 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 202 | 2.0 | 1498.0 | 13.87 | 65.1 |
| 202 | 6.0 | 1498.0 | 13.86 | 65.3 |
| 202 | 10.0 | 1498.0 | 13.85 | 65.6 |
| 202 | 15.0 | 1497.9 | 13.79 | 63.8 |
| 202 | 20.0 | 1497.7 | 13.67 | 55.8 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-3 DEPTH: 30 m
DATE: 8-11-69 TIME: 1415
LAT: 36°-53.5' LONG: 121°-59.4'
WIND DIR: 100° SPEED: 15
AIR TEMP(DRY): 63° BARO: 29.70
CLOUD AMT: 5 HEIGHT(FT): 2000
SEA: 110°-2 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 203 | 2.0 | 1498.6 | 14.06 | 64.7 |
| 203 | 6.0 | 1498.6 | 14.04 | 64.5 |
| 203 | 15.0 | 1498.1 | 13.84 | 64.8 |
| 203 | 19.0 | 1498.2 | 13.83 | 64.4 |
| 203 | 25.0 | 1498.1 | 13.77 | 61.3 |

* RELATIVE VALUES ONLY

STATION: B-4 DEPTH: 58 m
DATE: 8-11-69 TIME: 1530
LAT: 36°-51.9' LONG: 121°-59.0'
WIND DIR: 100° SPEED: 15
AIR TEMP(DRY): 63° BARO: 29.69
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: 110°-2 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 204 | 1.0 | 1498.6 | 14.07 | 68.5 |
| 204 | 5.0 | 1498.7 | 14.06 | 68.5 |
| 204 | 11.0 | 1498.7 | 14.04 | 68.2 |
| 204 | 20.0 | 1498.5 | 13.91 | 72.5 |
| 204 | 25.0 | 1497.8 | 13.66 | 67.3 |
| 204 | 31.0 | 1497.2 | 13.47 | 69.6 |
| 204 | 40.0 | 1496.9 | 13.35 | 61.4 |
| 204 | 45.0 | 1497.4 | 13.34 | 63.5 |
| 204 | 50.0 | 1496.9 | 13.28 | 49.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-5 DEPTH: 81 m
DATE: 8-11-69 TIME: 1650
LAT: 36°-50.7' LONG: 121°-59.4'
WIND DIR: 100° SPEED: 15
AIR TEMP(DRY): 63° BARO: 29.69
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: 110°-2 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 205 | 0.0 | 1498.8 | 14.11 | 76.7 |
| 205 | 6.0 | 1498.8 | 14.10 | 76.5 |
| 205 | 16.0 | 1498.5 | 13.96 | 71.7 |
| 205 | 21.0 | 1498.5 | 13.91 | 72.1 |
| 205 | 31.0 | 1497.5 | 13.62 | 69.4 |
| 205 | 37.0 | 1497.3 | 13.49 | 70.1 |
| 205 | 45.0 | 1497.3 | 13.41 | 72.0 |
| 205 | 56.0 | 1496.5 | 13.09 | 52.5 |
| 205 | 61.0 | 1496.4 | 13.07 | 46.4 |
| 205 | 66.0 | 1496.5 | 13.06 | 44.2 |
| 205 | 69.0 | 1496.5 | 13.07 | 37.6 |

* RELATIVE VALUES ONLY

STATION: B-6 DEPTH: 205 m
DATE: 8-11-69 TIME: 1830
LAT: 36°-48.9' LONG: 121°-59.0'
WIND DIR: 100° SPEED: 10
AIR TEMP(DRY): 58 BARO: 29.74
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 206 | 0.0 | 1499.9 | 14.47 | 71.2 |
| 206 | 4.0 | 1499.8 | 14.43 | 71.9 |
| 206 | 14.0 | 1499.6 | 14.31 | 73.9 |
| 206 | 24.0 | 1499.3 | 14.18 | 75.6 |
| 206 | 34.0 | 1499.0 | 14.03 | 76.0 |
| 206 | 44.0 | 1498.8 | 13.90 | 71.7 |
| 206 | 53.0 | 1497.8 | 13.53 | 75.5 |
| 206 | 64.0 | 1497.2 | 13.31 | 76.4 |
| 206 | 68.0 | 1496.9 | 13.19 | 70.1 |
| 206 | 74.0 | 1496.9 | 13.14 | 64.4 |
| 206 | 83.0 | 1496.8 | 13.08 | 62.1 |
| 206 | 94.0 | 1496.8 | 13.03 | 59.4 |
| 206 | 98.0 | 1496.7 | 12.98 | 56.4 |

TABLE 1 (Cont.)

STATION: B-7 DEPTH: 320 m
DATE: 8-11-69 TIME: 2015
LAT: 36°-47.4' LONG: 121°-59.0'
WIND DIR: 315° SPEED: 8
AIR TEMP(DRY): 53° BARO: 29.74
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 207 | 1.0 | 1499.6 | 14.40 | 77.5 |
| 207 | 3.0 | 1499.5 | 14.35 | 79.1 |
| 207 | 10.0 | 1499.6 | 14.34 | 79.1 |
| 207 | 18.0 | 1499.6 | 14.28 | 79.9 |
| 207 | 30.0 | 1499.6 | 14.24 | 79.9 |
| 207 | 49.0 | 1499.0 | 13.91 | 73.0 |
| 207 | 59.0 | 1497.9 | 13.57 | 39.5 |
| 207 | 68.0 | 1497.3 | 13.29 | 52.4 |
| 207 | 77.0 | 1496.3 | 12.91 | 36.8 |
| 207 | 88.0 | 1494.3 | 12.30 | 30.5 |
| 207 | 98.0 | 1492.8 | 11.79 | 62.0 |

* RELATIVE VALUES ONLY

STATION: B-8 DEPTH: 882 m
DATE: 8-11-69 TIME: 2230
LAT: 36°-47.0' LONG: 121°-59.2'
WIND DIR: 090° SPEED: 12
AIR TEMP(DRY): 59° BARO: 29.76
CLOUD AMT: 4 HEIGHT(FT): 2000
SEA: 100°-2 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 208 | 1.0 | 1499.9 | 14.51 | 71.8 |
| 208 | 9.0 | 1500.2 | 14.53 | 72.4 |
| 208 | 19.0 | 1500.2 | 14.48 | 71.7 |
| 208 | 29.0 | 1500.1 | 14.39 | 74.9 |
| 208 | 40.0 | 1499.6 | 14.20 | 74.2 |
| 208 | 49.0 | 1499.5 | 14.10 | 76.8 |
| 208 | 59.0 | 1496.9 | 13.19 | 77.7 |
| 208 | 69.0 | 1496.1 | 12.95 | 77.1 |
| 208 | 79.0 | 1495.1 | 12.60 | 69.3 |
| 208 | 89.0 | 1494.9 | 12.49 | 74.8 |
| 208 | 101.0 | 1493.2 | 11.95 | 76.3 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-9 DEPTH: 306 m
DATE: 9-11-69 TIME: 0130
LAT: 36°-44.6' LONG: 121°-58.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.85
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 209 | 1.0 | 1500.2 | 14.58 | 63.1 |
| 209 | 6.0 | 1500.3 | 14.58 | 63.8 |
| 209 | 9.0 | 1500.4 | 14.58 | 63.8 |
| 209 | 16.0 | 1500.5 | 14.58 | 63.8 |
| 209 | 26.0 | 1500.6 | 14.57 | 64.0 |
| 209 | 36.0 | 1500.6 | 14.47 | 67.0 |
| 209 | 46.0 | 1500.0 | 14.21 | 66.0 |
| 209 | 55.0 | 1499.9 | 14.17 | 63.9 |
| 209 | 65.0 | 1499.9 | 14.13 | 63.0 |
| 209 | 77.0 | 1499.8 | 13.94 | 65.8 |
| 209 | 89.0 | 1498.1 | 13.37 | 58.0 |
| 209 | 98.0 | 1495.9 | 12.91 | 62.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-10 DEPTH: 320 m
DATE: 9-11-69 TIME: 0255
LAT: 36°-43.0' LONG: 121°-58.9'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.85
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 210 | 1.0 | 1500.4 | 14.64 | 63.5 |
| 210 | 6.0 | 1500.4 | 14.64 | 63.4 |
| 210 | 10.0 | 1500.6 | 14.63 | 63.4 |
| 210 | 15.0 | 1500.6 | 14.64 | 63.9 |
| 210 | 21.0 | 1500.7 | 14.63 | 64.0 |
| 210 | 25.0 | 1500.7 | 14.62 | 64.0 |
| 210 | 30.0 | 1500.7 | 14.59 | 64.3 |
| 210 | 34.0 | 1500.5 | 14.49 | 66.0 |
| 210 | 40.0 | 1500.4 | 14.43 | 67.0 |
| 210 | 45.0 | 1500.4 | 14.41 | 67.2 |
| 210 | 50.0 | 1500.5 | 14.40 | 67.8 |
| 210 | 55.0 | 1500.0 | 14.24 | 65.9 |
| 210 | 62.0 | 1500.1 | 14.21 | 64.8 |
| 210 | 72.0 | 1500.2 | 14.21 | 63.8 |
| 210 | 80.0 | 1500.2 | 14.15 | 63.2 |
| 210 | 85.0 | 1500.2 | 14.13 | 63.2 |
| 210 | 91.0 | 1499.5 | 13.84 | 65.0 |
| 210 | 101.0 | 1497.1 | 13.10 | 64.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-11 DEPTH: 113 m
DATE: 9-11-69 TIME: 0500
LAT: 36°-41.4' LONG: 121°-59.2
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.84
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 211 | 5.0 | 1500.4 | 14.59 | 65.1 |
| 211 | 10.0 | 1500.5 | 14.60 | 65.0 |
| 211 | 15.0 | 1500.6 | 14.59 | 65.0 |
| 211 | 20.0 | 1500.6 | 14.60 | 65.0 |
| 211 | 27.0 | 1500.8 | 14.60 | 65.7 |
| 211 | 36.0 | 1500.8 | 14.56 | 66.3 |
| 211 | 50.0 | 1501.1 | 14.56 | 66.9 |
| 211 | 56.0 | 1501.1 | 14.56 | 67.0 |
| 211 | 64.0 | 1501.2 | 14.56 | 66.8 |
| 211 | 71.0 | 1501.3 | 14.52 | 66.5 |
| 211 | 79.0 | 1500.2 | 14.21 | 66.0 |
| 211 | 85.0 | 1500.1 | 14.10 | 66.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-12 DEPTH: 108 m
DATE: 9-11-69 TIME: 0630
LAT: 36°-40.1' LONG: 121°-59.3'
WIND DIR: 060° SPEED: 10
AIR TEMP(DRY): 60° BARO: 29.83
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 212 | 0.0 | 1499.7 | 14.39 | 63.9 |
| 212 | 5.0 | 1499.7 | 14.39 | 64.0 |
| 212 | 10.0 | 1499.8 | 14.39 | 64.0 |
| 212 | 15.0 | 1499.9 | 14.39 | 64.0 |
| 212 | 20.0 | 1499.8 | 14.34 | 64.4 |
| 212 | 28.0 | 1499.9 | 14.33 | 65.0 |
| 212 | 35.0 | 1500.1 | 14.34 | 65.0 |
| 212 | 41.0 | 1500.2 | 14.35 | 64.8 |
| 212 | 46.0 | 1500.3 | 14.36 | 65.0 |
| 212 | 52.0 | 1500.2 | 14.33 | 66.0 |
| 212 | 55.0 | 1500.4 | 14.33 | 66.0 |
| 212 | 60.0 | 1500.3 | 14.30 | 65.0 |
| 212 | 65.0 | 1500.1 | 14.21 | 65.8 |
| 212 | 71.0 | 1500.2 | 14.18 | 65.0 |
| 212 | 74.0 | 1500.2 | 14.17 | 65.0 |
| 212 | 81.0 | 1500.2 | 14.14 | 64.3 |
| 212 | 87.0 | 1499.4 | 13.82 | 60.0 |
| 212 | 91.0 | 1497.8 | 13.31 | 56.0 |
| 212 | 97.0 | 1494.0 | 12.16 | 55.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: B-13 DEPTH: 74 m
DATE: 9-11-69 TIME: 0815
LAT: 36°-38.2' LONG: 121°-59.3'
WIND DIR: 045° SPEED: 10
AIR TEMP(DRY): 62 BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 213 | 1.0 | 1500.0 | 14.50 | 64.8 |
| 213 | 31.0 | 1500.2 | 14.50 | 65.8 |
| 213 | 55.0 | 1500.0 | 14.23 | 64.2 |
| 213 | 65.0 | 1498.6 | 13.72 | 67.2 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: C-1 DEPTH: 650 m
DATE: 9-11-69 TIME: 0945
LAT: 36°-36.0' LONG: 121°-02.2'
WIND DIR: 040° SPEED: 15
AIR TEMP(DRY): 58° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: 040°-3 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 301 | 1.0 | 1499.9 | 14.46 | 58.9 |
| 301 | 5.0 | 1499.8 | 14.44 | 60.0 |
| 301 | 10.0 | 1499.8 | 14.39 | 60.0 |
| 301 | 16.0 | 1499.8 | 14.38 | 60.0 |
| 301 | 21.0 | 1499.8 | 14.36 | 61.5 |
| 301 | 26.0 | 1500.0 | 14.37 | 61.0 |
| 301 | 32.0 | 1500.0 | 14.35 | 61.3 |
| 301 | 36.0 | 1500.1 | 14.35 | 62.0 |
| 301 | 40.0 | 1500.1 | 14.34 | 62.0 |
| 301 | 45 0 | 1500.1 | 14.32 | 60.0 |
| 301 | 50.0 | 1499.8 | 14.17 | 63.0 |
| 301 | 55.0 | 1498.6 | 13.74 | 65.0 |
| 301 | 61.0 | 1497.4 | 13.40 | 65.2 |
| 301 | 75.0 | 1494.5 | 12.40 | 74.0 |
| 301 | 80.0 | 1493.9 | 12.22 | 72.5 |
| 301 | 86.0 | 1493.9 | 12.21 | 72.0 |
| 301 | 90.0 | 1493.8 | 12.14 | 71.3 |
| 301 | 95.0 | 1492.9 | 11.82 | 77.0 |
| 301 | 100.0 | 1491.9 | 11.48 | 78.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: C-2 DEPTH: 1094 m
DATE: 9-11-69 TIME: 1130
LAT: 36°-34.0' LONG: 121°-04.3'
WIND DIR: 040° SPEED: 15
AIR TEMP(DRY): 61° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: 040°-3 SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 302 | 0.0 | 1499.6 | 14.40 | 66.0 |
| 302 | 10.0 | 1499.5 | 14.29 | 64.8 |
| 302 | 20.0 | 1499.5 | 14.24 | 69.0 |
| 302 | 30.0 | 1499.6 | 14.21 | 70.7 |
| 302 | 50.0 | 1499.5 | 14.10 | 74.2 |
| 302 | 60.0 | 1496.3 | 13.07 | 80.5 |
| 302 | 71.0 | 1494.5 | 12.45 | 81.4 |
| 302 | 81.0 | 1492.8 | 11.92 | 81.8 |
| 302 | 90.0 | 1491.8 | 11.53 | 83.9 |
| 302 | 101.0 | 1490.9 | 11.24 | 87.2 |

* RELATIVE VALUES ONLY

STATION: C-3 DEPTH: 1244 m
DATE: 9-11-69 TIME: 1315
LAT: 36°-31.6' LONG: 121°-07.0'
WIND DIR: 310° SPEED: 10
AIR TEMP(DRY): 60° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 303 | 1.0 | 1501.9 | 15.12 | 68.1 |
| 303 | 11.0 | 1501.9 | 15.07 | 66.3 |
| 303 | 20.0 | 1500.1 | 14.46 | 68.3 |
| 303 | 32.0 | 1499.5 | 14.22 | 70.7 |
| 303 | 41.0 | 1497.9 | 13.83 | 79.5 |
| 303 | 45.0 | 1495.4 | 12.84 | 81.8 |
| 303 | 50.0 | 1494.9 | 12.75 | 82.3 |
| 303 | 59.0 | 1493.8 | 12.30 | 83.7 |
| 303 | 69.0 | 1491.4 | 11.52 | 89.6 |
| 303 | 75.0 | 1490.4 | 11.18 | 88.7 |
| 303 | 84.0 | 1490.0 | 11.02 | 89.5 |
| 303 | 100.0 | 1489.6 | 10.84 | 88.2 |

TABLE 1 (Cont.)

STATION: D-1 DEPTH: -
DATE: 9-11-69 TIME: 1445
LAT: 36°-34.9' LONG: 121°-11.2'
WIND DIR: 310° SPEED: 10
AIR TEMP(DRY): 60° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 401 | 2.0 | 1500.1 | 14.53 | 67.3 |
| 401 | 11.0 | 1499.5 | 14.32 | 68.5 |
| 401 | 20.0 | 1499.3 | 14.21 | 69.1 |
| 401 | 31.0 | 1498.7 | 14.00 | 68.4 |
| 401 | 40.0 | 1497.9 | 13.68 | 71.6 |
| 401 | 49.0 | 1494.2 | 12.47 | 85.2 |
| 401 | 56.0 | 1493.6 | 12.23 | 85.3 |
| 401 | 65.0 | 1492.1 | 11.78 | 86.3 |
| 401 | 75.0 | 1491.0 | 11.43 | 85.9 |
| 401 | 85.0 | 1490.2 | 11.10 | 85.9 |
| 401 | 100.0 | 1489.2 | 10.77 | 87.2 |

* RELATIVE VALUES ONLY

STATION: D-2 DEPTH: 1373 m
DATE: 9-11-69 TIME: 1630
LAT: 36°-39.1' LONG: 121°-15.1'
WIND DIR: 310° SPEED: 10
AIR TEMP(DRY): 60° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 270°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 402 | 0.0 | 1500.3 | 14.71 | 83.4 |
| 402 | 8.0 | 1499.7 | 14.36 | 85.9 |
| 402 | 18.0 | 1499.7 | 14.30 | 85.9 |
| 402 | 28.0 | 1497.7 | 14.27 | 88.1 |
| 402 | 34.0 | 1498.8 | 14.27 | 89.2 |
| 402 | 38.0 | 1499.7 | 14.27 | 90.3 |
| 402 | 48.0 | 1499.6 | 14.15 | 90.9 |
| 402 | 58.0 | 1494.7 | 12.66 | 93.2 |
| 402 | 63.0 | 1493.3 | 12.21 | 94.6 |
| 402 | 68.0 | 1491.9 | 11.79 | 95.1 |
| 402 | 78.0 | 1489.6 | 11.00 | 97.7 |
| 402 | 88.0 | 1488.3 | 10.55 | 98.2 |
| 402 | 98.0 | 1488.3 | 10.45 | 93.7 |

TABLE 1 (Cont.)

STATION: D-3 DEPTH: 1405 m
DATE: 9-11-69 TIME: 1830
LAT: 36°-42.0' LONG: 121°-19.2'
WIND DIR: 315° SPEED: 20
AIR TEMP(DRY): 58° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 403 | 0.0 | 1501.0 | 14.80 | 68.5 |
| 403 | 9.0 | 1500.9 | 14.78 | 68.5 |
| 403 | 18.0 | 1500.8 | 14.67 | 68.5 |
| 403 | 27.0 | 1500.8 | 14.62 | 70.4 |
| 403 | 38.0 | 1500.9 | 13.59 | 75.1 |
| 403 | 48.0 | 1494.3 | 12.52 | 86.6 |
| 403 | 58.0 | 1491.6 | 11.71 | 88.3 |
| 403 | 68.0 | 1490.5 | 11.39 | 89.1 |
| 403 | 78.0 | 1489.4 | 10.95 | 89.5 |
| 403 | 88 0 | 1489.1 | 10.79 | 89.8 |
| 403 | 98.0 | 1488.2 | 10.48 | 90.0 |

* RELATIVE VALUES ONLY

STATION: E-1 DEPTH: 756 m
DATE: 9-11-69 TIME: 2015
LAT: 36°-46.6' LONG: 121°-15.1'
WIND DIR: 000° SPEED: 16
AIR TEMP(DRY): 58° BARO: 29.80
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 501 | 0.0 | 1500.3 | 14.62 | 70.9 |
| 501 | 10.0 | 1500.5 | 14.59 | 70.0 |
| 501 | 20.0 | 1500.2 | 14.46 | 70.3 |
| 501 | 30.0 | 1500.3 | 14.43 | 73.5 |
| 501 | 40.0 | 1498.5 | 13.80 | 80.7 |
| 501 | 44.0 | 1495.4 | 12.82 | 85.4 |
| 501 | 49.0 | 1494.1 | 12.35 | 87.1 |
| 501 | 55.0 | 1492.1 | 11.85 | 87.9 |
| 501 | 61.0 | 1490.5 | 11.32 | 88.7 |
| 501 | 69.0 | 1490.0 | 11.14 | 88.6 |
| 501 | 75.0 | 1489.2 | 10.91 | 88.6 |
| 501 | 82.0 | 1488.9 | 10.77 | 86.9 |
| 501 | 98.0 | 1488.2 | 10.50 | 87.6 |

TABLE 1 (Cont.)

STATION: E-2 DEPTH: 366 m
DATE: 9-11-69 TIME: 2145
LAT: 36°-51.0' LONG: 121°-10.9'
WIND DIR: 040° SPEED: 8
AIR TEMP(DRY): 59° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 502 | 0.0 | 1500.5 | 14.67 | 72.7 |
| 502 | 10.0 | 1500.8 | 14.69 | 72.5 |
| 502 | 20.0 | 1500.8 | 14.68 | 74.8 |
| 502 | 28.0 | 1500.6 | 14.55 | 79.3 |
| 502 | 33.0 | 1500.7 | 14.53 | 80.0 |
| 502 | 43.0 | 1500.3 | 14.37 | 80.5 |
| 502 | 54.0 | 1492.9 | 12.14 | 86.2 |
| 502 | 63.0 | 1491.8 | 11.69 | 87.0 |
| 502 | 73.0 | 1490.3 | 11.21 | 86.1 |
| 502 | 84.0 | 1489.8 | 11.00 | 85.2 |
| 502 | 98.0 | 1489.4 | 10.78 | 85.4 |

RELATIVE VALUES ONLY

STATION: E-3 DEPTH: 139 m
DATE: 9-11-69 TIME: 2300
LAT: 36°-51.7' LONG: 121°-09.9'
WIND DIR: 040° SPEED: 8
AIR TEMP(DRY): 59° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 503 | 0.0 | 1500.5 | 14.66 | 73.1 |
| 503 | 9.0 | 1500.6 | 14.64 | 78.9 |
| 503 | 15.0 | 1500.6 | 14.60 | 79.6 |
| 503 | 25.0 | 1500.4 | 14.50 | 77.7 |
| 503 | 34.0 | 1499.7 | 14.23 | 70.9 |
| 503 | 39.0 | 1499.7 | 14.19 | 70.9 |
| 503 | 49.0 | 1498.5 | 13.79 | 78.1 |
| 503 | 59.0 | 1492.7 | 12.01 | 86.4 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: E-4 DEPTH: 90 m
DATE: 10-11-69 TIME: 0045
LAT: 36°-53.0' LONG: 121°-08.2'
WIND DIR: 300° SPEED: 8
AIR TEMP(DRY): 55° BARO: 29.81
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 504 | 0.0 | 1499.9 | 14.47 | 68.2 |
| 504 | 10.0 | 1500.0 | 14.44 | 69.2 |
| 504 | 20.0 | 1499.8 | 14.34 | 72.0 |
| 504 | 24.0 | 1499.5 | 14.22 | 73.5 |
| 504 | 30.0 | 1499.5 | 14.19 | 74.0 |
| 504 | 38.0 | 1498.9 | 13.95 | 75.7 |
| 504 | 48.0 | 1498.8 | 13.87 | 77.2 |
| 504 | 59.0 | 1497.4 | 13.22 | 79.7 |
| 504 | 68.0 | 1493.5 | 12.14 | 67.0 |
| 504 | 74.0 | 1493.1 | 11.98 | 69.8 |
| 504 | 79.0 | 1492.7 | 11.86 | 69.9 |

* RELATIVE VALUES ONLY

STATION: E-5 DEPTH: 72 m
DATE: 10-11-69 TIME: 0200
LAT: 36°-54.7' LONG: 121°-07.3'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.84
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 505 | 0.0 | 1500.1 | 14.53 | 69.6 |
| 505 | 4.0 | 1500.1 | 14.52 | 69.8 |
| 505 | 9.0 | 1500.2 | 14.51 | 67.8 |
| 505 | 18.0 | 1500.2 | 14.47 | 72.2 |
| 505 | 29.0 | 1499.9 | 14.30 | 74.7 |
| 505 | 39.0 | 1497.6 | 13.57 | 76.0 |
| 505 | 48.0 | 1496.2 | 13.04 | 68.5 |
| 505 | 53.0 | 1496.0 | 12.99 | 49.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: E-6 DEPTH: 55 m
DATE: 10-11-69 TIME: 0330
LAT: 36°-55.4' LONG: 121°-06.2'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.83
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 506 | 0.0 | 1500.2 | 14.56 | 62.0 |
| 506 | 5.0 | 1500.2 | 14.53 | 63.0 |
| 506 | 10.0 | 1500.1 | 14.50 | 66.0 |
| 506 | 14.0 | 1500.0 | 14.42 | 63.0 |
| 506 | 18.0 | 1499.1 | 14.12 | 67.8 |
| 506 | 29.0 | 1497.9 | 13.68 | 43.5 |
| 506 | 33.0 | 1497.9 | 13.66 | 47.4 |

* RELATIVE VALUES ONLY

STATION: E-7 DEPTH: 35 m
DATE: 10-11-69 TIME: 0500
LAT: 36°-56.0' LONG: 121°-04.8'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.83
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 507 | 0.0 | 1499.8 | 14.44 | 65.7 |
| 507 | 3.0 | 1499.9 | 14.44 | 64.8 |
| 507 | 7.0 | 1500.0 | 14.44 | 61.9 |
| 507 | 11.0 | 1500.0 | 14.43 | 62.5 |
| 507 | 16.0 | 1499.6 | 14.26 | 61.0 |
| 507 | 21.0 | 1499.1 | 14.12 | 55.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: F-1 DEPTH: 36 m
DATE: 10-11-69 TIME: 1045
LAT: 36°-57.8' LONG: 121°-10.0'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 29.84
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 601 | 0.0 | 1500.3 | 14.63 | 65.5 |
| 601 | 10.0 | 1500.2 | 14.55 | 66.4 |
| 601 | 21.0 | 1500.0 | 14.42 | 68.1 |
| 601 | 27.0 | 1499.7 | 14.27 | 59.6 |

* RELATIVE VALUES ONLY

STATION: F-2 DEPTH: 36 m
DATE: 10-11-69 TIME: 1230
LAT: 37°-00.8' LONG: 122°-14.4'
WIND DIR: 160° SPEED: 8
AIR TEMP(DRY): 64° BARO: 29.85
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 290°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 602 | 1.0 | 1499.9 | 14.50 | 69.2 |
| 602 | 7.0 | 1499.7 | 14.39 | 68.1 |
| 602 | 12.0 | 1499.7 | 14.36 | 69.6 |
| 602 | 16.0 | 1499.5 | 14.27 | 66.0 |
| 602 | 21.0 | 1499.1 | 14.11 | 56.2 |
| 602 | 27.0 | 1499.1 | 14.09 | 51.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: F-3 DEPTH: 26 m
DATE: 10-11-69 TIME: 1330
LAT: 37°-04.5' LONG: 122°-17.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 290°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 603 | 1.0 | 1499.0 | 14.20 | 56.8 |
| 603 | 7.0 | 1498.8 | 14.12 | 51.8 |
| 603 | 12.0 | 1498.6 | 14.02 | 35.0 |
| 603 | 17.0 | 1498.2 | 13.89 | 34.0 |

* RELATIVE VALUES ONLY

STATION: G-1 DEPTH: 55 m
DATE: 10-11-69 TIME: 1430
LAT: 37°-03.0' LONG: 122°-19.4'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 290°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 701 | 1.0 | 1500.6 | 14.66 | 66.9 |
| 701 | 6.0 | 1500.1 | 14.53 | 65.9 |
| 701 | 12.0 | 1499.5 | 14.31 | 66.6 |
| 701 | 15.0 | 1498.6 | 14.01 | 70.3 |
| 701 | 21.0 | 1498.4 | 13.92 | 59.2 |
| 701 | 26.0 | 1498.5 | 13.99 | 54.5 |
| 701 | 32.0 | 1498.6 | 13.89 | 54.2 |
| 701 | 40.0 | 1498.7 | 13.90 | 52.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: G-2 DEPTH: 70 m
DATE: 10-11-69 TIME: 1545
LAT: 37°-02,0' LONG: 122°-20.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 702 | 2,0 | 1501,3 | 14,95 | 66,2 |
| 702 | 10,0 | 1500,0 | 14,48 | 65,6 |
| 702 | 22,0 | 1497,7 | 13,68 | 55,0 |
| 702 | 26,0 | 1497,7 | 13,64 | 51,3 |
| 702 | 32,0 | 1497,7 | 13,62 | 49,7 |
| 702 | 41,0 | 1497,8 | 13,63 | 48,7 |
| 702 | 52,0 | 1497,9 | 13,58 | 47,8 |

* RELATIVE VALUES ONLY

STATION: G-3 DEPTH: 95 m
DATE: 10-11-69 TIME: 1700
LAT: 37°-01.8' LONG: 122°-22.2'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 29.82
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 703 | 0,0 | 1501,6 | 14,99 | 66,4 |
| 703 | 11,0 | 1500,5 | 14,63 | 64,5 |
| 703 | 21,0 | 1500,4 | 14,53 | 66,2 |
| 703 | 31,0 | 1499,7 | 14,31 | 77,8 |
| 703 | 37,0 | 1498,9 | 14,10 | 78,0 |
| 703 | 42,0 | 1498,4 | 13,86 | 75,8 |
| 703 | 51,0 | 1498,1 | 13,65 | 77,9 |
| 703 | 61,0 | 1497,5 | 13,42 | 53,9 |
| 703 | 69,0 | 1495,2 | 12,69 | 53,0 |
| 703 | 80,0 | 1493,6 | 12,15 | 59,9 |

RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: G-4 DEPTH: 123 m
DATE: 10-11-69 TIME: 1900
LAT: 37°-00.8' LONG: 122°-23.5'
WIND DIR: 315° SPEED: 12
AIR TEMP(DRY): 58° BARO: 29.84
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 704 | 0.0 | 1501.3 | 14.91 | 69.9 |
| 704 | 10.0 | 1501.0 | 14.77 | 69.9 |
| 704 | 20.0 | 1500.5 | 14.57 | 73.6 |
| 704 | 31.0 | 1500.5 | 14.52 | 76.0 |
| 704 | 40.0 | 1500.3 | 14.40 | 80.9 |
| 704 | 49.0 | 1496.3 | 13.35 | 83.7 |
| 704 | 59.0 | 1492.7 | 11.98 | 85.0 |
| 704 | 70.0 | 1492.7 | 11.92 | 69.0 |
| 704 | 79.0 | 1492.5 | 11.82 | 68.0 |
| 704 | 90.0 | 1492.1 | 11.66 | 62.6 |
| 704 | 99.0 | 1492.2 | 11.62 | 57.4 |

* RELATIVE VALUES ONLY

STATION: G-5 DEPTH: 406 m
DATE: 10-11-69 TIME: 2115
LAT: 36°-59.4' LONG: 122°-25.0'
WIND DIR: 315° SPEED: 12
AIR TEMP(DRY): 58° BARO: 29.84
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-4

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 705 | 0.0 | 1500.7 | 14.73 | 72.2 |
| 705 | 9.0 | 1500.7 | 14.68 | 73.8 |
| 705 | 20.0 | 1500.5 | 14.57 | 73.8 |
| 705 | 31.0 | 1500.7 | 14.55 | 76.8 |
| 705 | 40.0 | 1493.4 | 12.42 | 86.5 |
| 705 | 50.0 | 1491.5 | 11.71 | 87.2 |
| 705 | 60.0 | 1490.2 | 11.26 | 85.4 |
| 705 | 70.0 | 1490.1 | 11.16 | 79.2 |
| 705 | 80.0 | 1489.7 | 11.01 | 69.1 |
| 705 | 90.0 | 1489.6 | 10.91 | 77.8 |
| 705 | 100.0 | 1489.5 | 10.81 | 64.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: G-6 DEPTH: 360 m
DATE: 10-11-69 TIME: 2330
LAT: 36°-57.5' LONG: 122°-27.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 54° BARO: 29.85
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 706 | 0.0 | 1500.5 | 14.68 | 71.0 |
| 706 | 10.0 | 1500.4 | 14.59 | 71.2 |
| 706 | 20.0 | 1500.5 | 14.56 | 72.0 |
| 706 | 29.0 | 1498.9 | 14.10 | 81.2 |
| 706 | 40.0 | 1492.7 | 12.17 | 87.8 |
| 706 | 49.0 | 1491.0 | 11.53 | 87.6 |
| 706 | 60.0 | 1489.9 | 11.17 | 87.0 |
| 706 | 70.0 | 1489.2 | 10.91 | 85.6 |
| 706 | 79.0 | 1489.0 | 10.79 | 85.8 |
| 706 | 90.0 | 1488.9 | 10.73 | 82.9 |
| 706 | 100.0 | 1488.6 | 10.56 | 72.5 |

* RELATIVE VALUES ONLY

STATION: G-7 DEPTH: 1325 m
DATE: 11-11-69 TIME: 0130
LAT: 36°-54.6' LONG: 122°-33.2'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.90
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 707 | 0.0 | 1499.7 | 14.43 | 72.0 |
| 707 | 9.0 | 1499.3 | 14.24 | 72.2 |
| 707 | 19.0 | 1499.3 | 14.20 | 74.1 |
| 707 | 29.0 | 1498.7 | 13.86 | 79.9 |
| 707 | 36.0 | 1496.7 | 13.32 | 82.6 |
| 707 | 41.0 | 1493.0 | 12.23 | 87.1 |
| 707 | 45.0 | 1491.0 | 11.60 | 87.4 |
| 707 | 54.0 | 1490.5 | 11.34 | 86.9 |
| 707 | 66.0 | 1488.9 | 10.92 | 88.8 |
| 707 | 76.0 | 1488.5 | 10.70 | 88.8 |
| 707 | 85.0 | 1488.1 | 10.49 | 88.2 |
| 707 | 100.0 | 1487.5 | 10.23 | 89.2 |

TABLE 1 (Cont.)

STATION: H-1 DEPTH: 1080 m
DATE: 11-11-69 TIME: 0530
LAT: 37°-01.3' LONG: 122°-46.5'
WIND DIR: 300° SPEED: 10
AIR TEMP(DRY): 58° BARO: 29.90
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 801 | 0.0 | 1500.5 | 14.79 | 73.1 |
| 801 | 10.0 | 1500.7 | 14.77 | 71.9 |
| 801 | 21.0 | 1500.3 | 14.55 | 71.2 |
| 801 | 31.0 | 1500.0 | 14.38 | 76.6 |
| 801 | 36.0 | 1499.5 | 14.20 | 80.2 |
| 801 | 40.0 | 1497.1 | 13.44 | 83.5 |
| 801 | 46.0 | 1496.0 | 13.10 | 85.1 |
| 801 | 50.0 | 1494.8 | 12.74 | 86.5 |
| 801 | 60.0 | 1491.5 | 11.67 | 88.5 |
| 801 | 71.0 | 1488.8 | 10.92 | 88.9 |
| 801 | 85.0 | 1487.8 | 10.48 | 89.2 |
| 801 | 99.0 | 1486.7 | 10.07 | 89.8 |

STATION: H-2 DEPTH: 634 m
DATE: 11-11-69 TIME: 0745
LAT: 37°-07.5' LONG: 122°-57.3'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 29.96
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 802 | 0.0 | 1500.8 | 14.83 | 66.9 |
| 802 | 9.0 | 1500.8 | 14.76 | 66.9 |
| 802 | 19.0 | 1500.9 | 14.73 | 67.8 |
| 802 | 28.0 | 1501.2 | 14.76 | 73.9 |
| 802 | 35.0 | 1501.2 | 14.73 | 75.8 |
| 802 | 39.0 | 1501.1 | 14.70 | 77.1 |
| 802 | 49.0 | 1497.5 | 13.43 | 81.2 |
| 802 | 59.0 | 1492.7 | 12.05 | 86.2 |
| 802 | 64.0 | 1492.3 | 11.92 | 86.4 |
| 802 | 78.0 | 1488.7 | 10.79 | 87.2 |
| 802 | 99.0 | 1486.5 | 10.01 | 87.3 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: I-1 DEPTH: 100 m
DATE: 11-11-69 TIME: 1100
LAT: 37°-11.1' LONG: 122°-36.8'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 61° BARO: 29.97
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 901 | 0.0 | 1500.7 | 14.78 | 65.5 |
| 901 | 5.0 | 1500.4 | 14.62 | 61.0 |
| 901 | 10.0 | 1500.1 | 14.51 | 59.8 |
| 901 | 20.0 | 1499.7 | 14.31 | 61.2 |
| 901 | 30.0 | 1499.2 | 14.14 | 65.3 |
| 901 | 40.0 | 1496.5 | 13.24 | 52.2 |
| 901 | 45.0 | 1496.0 | 13.04 | 42.0 |
| 901 | 50.0 | 1496.0 | 13.02 | 41.6 |
| 901 | 60.0 | 1495.4 | 12.78 | 41.9 |
| 901 | 71.0 | 1494.9 | 12.61 | 47.5 |
| 901 | 81.0 | 1493.7 | 12.19 | 48.6 |
| 901 | 86.0 | 1493.2 | 12.01 | 47.2 |

STATION: I-2 DEPTH: 92 m
DATE: 11-11-70 TIME: 1215
LAT: 37°-11.1' LONG: 122°-34.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 71° BARO: 29.97
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 315°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 902 | 1.0 | 1501.7 | 15.09 | 69.3 |
| 902 | 10.0 | 1500.4 | 14.60 | 69.7 |
| 902 | 20.0 | 1500.2 | 14.49 | 77.2 |
| 902 | 25.0 | 1499.4 | 14.20 | 81.8 |
| 902 | 30.0 | 1497.8 | 13.72 | 84.5 |
| 902 | 40.0 | 1496.1 | 13.12 | 73.4 |
| 902 | 50.0 | 1495.8 | 12.96 | 57.6 |
| 902 | 59.0 | 1495.6 | 12.85 | 50.4 |
| 902 | 70.0 | 1495.6 | 12.79 | 53.2 |
| 902 | 75.0 | 1495.6 | 12.77 | 55.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: I-3 DEPTH: 90 m
DATE: 11-11-69 TIME: 2015
LAT: 37°-11.1' LONG: 122°-34.0'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 29.96
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 903 | 0.0 | 1500.3 | 14.59 | 69.3 |
| 903 | 10.0 | 1500.2 | 14.53 | 70.2 |
| 903 | 20.0 | 1499.8 | 14.34 | 78.3 |
| 903 | 25.0 | 1499.2 | 14.14 | 78.5 |
| 903 | 36.0 | 1496.6 | 13.29 | 78.6 |
| 903 | 46.0 | 1494.0 | 12.49 | 70.4 |
| 903 | 50.0 | 1493.1 | 12.13 | 65.1 |
| 903 | 56.0 | 1492.8 | 12.05 | 61.3 |
| 903 | 60.0 | 1493.0 | 12.04 | 54.4 |
| 903 | 65.0 | 1492.7 | 11.95 | 45.6 |
| 903 | 71.0 | 1492.4 | 11.84 | 44.2 |
| 903 | 76.0 | 1492.4 | 11.78 | 43.6 |

STATION: I-4 DEPTH: 89 m
DATE: 11-11-69 TIME: 2130
LAT: 37°-11.1' LONG: 122°-32.4'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 56° BARO: 29.99
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 904 | 0.0 | 1501.2 | 14.95 | 72.2 |
| 904 | 10.0 | 1500.3 | 14.54 | 70.7 |
| 904 | 15.0 | 1500.0 | 14.44 | 72.9 |
| 904 | 21.0 | 1499.8 | 14.35 | 79.9 |
| 904 | 24.0 | 1498.7 | 14.05 | 83.0 |
| 904 | 29.0 | 1497.4 | 13.54 | 58.2 |
| 904 | 41.0 | 1496.6 | 13.26 | 64.2 |
| 904 | 51.0 | 1494.5 | 12.61 | 67.9 |
| 904 | 60.0 | 1492.8 | 12.02 | 61.8 |
| 904 | 69.0 | 1492.9 | 11.95 | 47.6 |
| 904 | 74.0 | 1492.6 | 11.86 | 45.0 |

RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: I-5 DEPTH: 84 m
DATE: 11-11-69 TIME: 2300
LAT: 37°-11.0' LONG: 122°-31.0'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 56° BARO: 29.99
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-3

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 905 | 0.0 | 1500.7 | 14.69 | 78.2 |
| 905 | 4.0 | 1500.5 | 14.63 | 74.9 |
| 905 | 10.0 | 1500.1 | 14.49 | 81.1 |
| 905 | 20.0 | 1499.8 | 14.34 | 83.0 |
| 905 | 30.0 | 1499.7 | 14.27 | 85.1 |
| 905 | 40.0 | 1499.1 | 14.06 | 83.8 |
| 905 | 50.0 | 1497.5 | 13.52 | 54.2 |
| 905 | 60.0 | 1496.5 | 13.12 | 55.0 |
| 905 | 70.0 | 1494.8 | 12.56 | 56.2 |

* RELATIVE VALUES ONLY

STATION: I-6 DEPTH: 77 m
DATE: 12-11-69 TIME: 0430
LAT: 37°-11.2' LONG: 122°-29.7'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 30.02
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 290°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 906 | 1.0 | 1500.4 | 14.64 | 67.9 |
| 906 | 10.0 | 1500.3 | 14.57 | 70.2 |
| 906 | 19.0 | 1499.8 | 14.38 | 71.5 |
| 906 | 29.0 | 1499.1 | 14.09 | 65.4 |
| 906 | 39.0 | 1498.7 | 13.91 | 49.3 |
| 906 | 49.0 | 1498.7 | 13.86 | 53.3 |
| 906 | 59.0 | 1498.3 | 13.68 | 55.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: I-7 DEPTH: 88 m
DATE: 12-11-69 TIME: 0545
LAT: 37°-11.3' LONG: 122°-28.0'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 57° BARO: 30.04
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 308°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 907 | 0.0 | 1500.1 | 14.53 | 73.2 |
| 907 | 4 0 | 1500.2 | 14.53 | 73.6 |
| 907 | 10.0 | 1500.2 | 14.53 | 73.7 |
| 907 | 19.0 | 1500.2 | 14.46 | 78.0 |
| 907 | 29 0 | 1499.6 | 14.26 | 79.2 |
| 907 | 40 0 | 1499.4 | 14.10 | 74.7 |
| 907 | 49.0 | 1499.0 | 13.94 | 61,5 |
| 907 | 60.0 | 1499.1 | 13.93 | 55.6 |

* RELATIVE VALUES ONLY

STATION: I-8 DEPTH: 55 m
DATE: 12-11-69 TIME: 0700
LAT: 37°-11.1' LONG: 122°-26.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 30.06
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 908 | 0.0 | 1499.9 | 14.48 | 69.0 |
| 908 | 5.0 | 1499.9 | 14.44 | 69.0 |
| 908 | 10.0 | 1499.8 | 14.39 | 71.4 |
| 908 | 20.0 | 1499.7 | 14.29 | 65.1 |
| 908 | 25.0 | 1499.7 | 14.27 | 63.3 |
| 908 | 30 0 | 1499.7 | 14.25 | 60.5 |
| 908 | 40.0 | 1499.8 | 14.22 | 55.1 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: I-9 DEPTH: 36 m
DATE: 12-11-69 TIME: 0810
LAT: 37°-11.2' LONG: 122°-25.1'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 30.06
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 909 | 0.0 | 1499.9 | 14.47 | 68.3 |
| 909 | 11.0 | 1499.5 | 14.29 | 64.0 |
| 909 | 15.0 | 1499.5 | 14.29 | 64.8 |
| 909 | 25.0 | 1499.7 | 14.29 | 64.4 |

* RELATIVE VALUES ONLY

STATION: J-1 DEPTH: 32 m
DATE: 12-11-69 TIME: 0915
LAT: 37°-16.0' LONG: 122°-27.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 71° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1001 | 0.0 | 1498.1 | 13.91 | 54.3 |
| 1001 | 10.0 | 1498.2 | 13.86 | 50.6 |
| 1001 | 16.0 | 1498.2 | 13.86 | 48.9 |
| 1001 | 20.0 | 1498.2 | 13.85 | 44.4 |
| 1001 | 22.0 | 1498.3 | 13.84 | 32.9 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: J-2 DEPTH: 38 m
DATE: 12-11-69 TIME: 1025
LAT: 37°-21.5' LONG: 122°-29.4
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 71° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1002 | 0.0 | 1498.5 | 14.03 | 79.2 |
| 1002 | 4.0 | 1498.3 | 13.95 | 78.4 |
| 1002 | 15.0 | 1498.3 | 13.90 | 75.1 |
| 1002 | 21.0 | 1498.3 | 13.85 | 65.9 |
| 1002 | 30.0 | 1498.2 | 13.79 | 60.7 |

* RELATIVE VALUES ONLY

STATION: J-3 DEPTH: 40 m
DATE: 12-11-69 TIME: 1210
LAT: 37°-26.5' LONG: 122°-31.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 61° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1003 | 0.0 | 1500.7 | 14.58 | 79.2 |
| 1003 | 9.0 | 1498.4 | 13.95 | 77.4 |
| 1003 | 20.0 | 1498.4 | 13.91 | 76.5 |
| 1003 | 29.0 | 1498.1 | 13.75 | 66.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: J-4 DEPTH: 37 m
DATE: 12-11-69 TIME: 1320
LAT: 37°-32.1' LONG: 122°-33.4'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 64° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1004 | 0.0 | 1499.1 | 14.22 | 29.5 |
| 1004 | 10.0 | 1497.4 | 13.69 | 31.5 |
| 1004 | 19.0 | 1497.7 | 13.63 | 33.6 |
| 1004 | 29.0 | 1497.8 | 13.65 | 41.7 |

* RELATIVE VALUES ONLY

STATION: K-1 DEPTH: 45 m
DATE: 12-11-69 TIME: 1410
LAT: 37°-32.0' LONG: 122°-34.7'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 64° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1101 | 0.0 | 1499.8 | 14.44 | 77.2 |
| 1101 | 10.0 | 1498.3 | 13.93 | 72.9 |
| 1101 | 15.0 | 1498.3 | 13.92 | 76.0 |
| 1101 | 19.0 | 1498.5 | 13.92 | 77.3 |
| 1101 | 30.0 | 1498.1 | 13.76 | 56.6 |
| 1101 | 34.0 | 1497.9 | 13.68 | 50.9 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-2 DEPTH: 47 m
DATE: 12-11-69 TIME: 1445
LAT: 37°-32.2' LONG: 122°-35.8'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 64° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1102 | 0.0 | 1500.2 | 14.55 | 78.2 |
| 1102 | 10.0 | 1498.4 | 13.97 | 78.2 |
| 1102 | 20.0 | 1498.4 | 13.93 | 81.5 |
| 1102 | 30.0 | 1498.5 | 13.88 | 79.9 |
| 1102 | 34.0 | 1498.3 | 13.80 | 81.0 |
| 1102 | 40.0 | 1497.7 | 13.61 | 67.6 |

* RELATIVE VALUES ONLY

STATION: K-3 DEPTH: 50 m
DATE: 12-11-69 TIME: 1530
LAT: 37°-32.2' LONG: 122°-37.2'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 64° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1103 | 0.0 | 1498.9 | 14.16 | 81.4 |
| 1103 | 10.0 | 1499.3 | 14.21 | 81.9 |
| 1103 | 19.0 | 1498.5 | 13.93 | 79.7 |
| 1103 | 29.0 | 1498.3 | 13.87 | 78.9 |
| 1103 | 39.0 | 1497.8 | 13.60 | 76.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-4 DEPTH: 54 m
DATE: 12-11-69 TIME: 1620
LAT: 37°-32.1' LONG: 122°-38.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 64° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1104 | 0.0 | 1500.7 | 14.68 | 77.4 |
| 1104 | 9.0 | 1498.7 | 14.04 | 77.6 |
| 1104 | 19.0 | 1498.7 | 13.98 | 78.7 |
| 1104 | 29.0 | 1498.6 | 13.91 | 80.6 |
| 1104 | 39.0 | 1498.3 | 13.79 | 78.5 |
| 1104 | 44.0 | 1497.6 | 13.55 | 61.5 |

* RELATIVE VALUES ONLY

STATION: K-5 DEPTH: 55 m
DATE: 12-11-69 TIME: 1715
LAT: 37°-32.0' LONG: 122°-39.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1105 | 0.0 | 1499.4 | 14.27 | 79.2 |
| 1105 | 4.0 | 1498.7 | 14.08 | 79.7 |
| 1105 | 10.0 | 1498.6 | 14.02 | 81.7 |
| 1105 | 20.0 | 1498.4 | 13.91 | 82.2 |
| 1105 | 30.0 | 1498.4 | 13.86 | 85.3 |
| 1105 | 39.0 | 1497.2 | 13.46 | 60.7 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-6 DEPTH: 70 m
DATE: 12-11-69 TIME: 1900
LAT: 37°-30.8' LONG: 122°-43.7'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1106 | 1.0 | 1499.0 | 14.19 | 65.3 |
| 1106 | 10.0 | 1498.7 | 14.04 | 65.3 |
| 1106 | 20.0 | 1498.3 | 13.88 | 67.7 |
| 1106 | 30.0 | 1498.1 | 13.75 | 68.2 |
| 1106 | 40.0 | 1497.8 | 13.60 | 68.2 |
| 1106 | 50 0 | 1497.1 | 13.33 | 60.2 |
| 1106 | 55.0 | 1496.7 | 13.19 | 51.7 |

* RELATIVE VALUES ONLY

STATION: K-8 DEPTH: 78 m
DATE: 12-11-69 TIME: 2030
LAT: 37°-32.2' LONG: 122°-48.6'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1108 | 1.0 | 1500.2 | 14.56 | 61.2 |
| 1108 | 10.0 | 1499.5 | 14.32 | 63.4 |
| 1108 | 20.0 | 1498.5 | 13.97 | 76.4 |
| 1108 | 31.0 | 1496.6 | 13.32 | 81.4 |
| 1108 | 41 0 | 1495.4 | 12.88 | 76.7 |
| 1108 | 51.0 | 1494.1 | 12.43 | 55.7 |
| 1108 | 61.0 | 1493.4 | 12.15 | 64.3 |
| 1108 | 69 0 | 1493.2 | 12.04 | 62.7 |
| 1108 | 74.0 | 1492.9 | 11.96 | 61.2 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-9 DEPTH: 90 m
DATE: 12-11-69 TIME: 2145
LAT: 37°-32.3' LONG: 122°-52.5'
WIND DIR: 000° SPEED: 8
AIR TEMP(DRY): 57° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1109 | 0.0 | 1501.3 | 14.91 | 61.3 |
| 1109 | 11.0 | 1500.1 | 14.48 | 65.2 |
| 1109 | 21.0 | 1499.3 | 14.21 | 72.6 |
| 1109 | 30.0 | 1494.2 | 12.63 | 79.1 |
| 1109 | 40.0 | 1493.1 | 12.22 | 67.4 |
| 1109 | 49.0 | 1493.1 | 12.15 | 66.4 |
| 1109 | 58.0 | 1493.1 | 12.06 | 61.0 |
| 1109 | 69.0 | 1492.6 | 11.91 | 61.0 |
| 1109 | 73.0 | 1492.3 | 11.79 | 59.6 |

* RELATIVE VALUES ONLY

STATION: K-10 DEPTH: 108 m
DATE: 12-11-69 TIME: 2300
LAT: 37°-32.2' LONG: 122°-56.0'
WIND DIR: 000° SPEED: 8
AIR TEMP(DRY): 57° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1110 | 0.0 | 1499.3 | 14.23 | 62.7 |
| 1110 | 11.0 | 1499.3 | 14.25 | 62.8 |
| 1110 | 19.0 | 1499.3 | 14.18 | 71.2 |
| 1110 | 29.0 | 1496.9 | 13.37 | 81.9 |
| 1110 | 40.0 | 1492.1 | 11.92 | 76.5 |
| 1110 | 49.0 | 1490.7 | 11.44 | 62.2 |
| 1110 | 54.0 | 1490.7 | 11.41 | 61.8 |
| 1110 | 58.0 | 1490.8 | 11.39 | 61.6 |
| 1110 | 68.0 | 1490.7 | 11.29 | 59.9 |
| 1110 | 79.0 | 1490.6 | 11.25 | 59.3 |
| 1110 | 87.0 | 1490.6 | 11.16 | 55.2 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-11 DEPTH: 1220 m
DATE: 13-11-69 TIME: 0110
LAT: 37°-11.1' LONG: 123°-09.3'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: 300°-2

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1111 | 0.0 | 1500.9 | 14.86 | 70.4 |
| 1111 | 10.0 | 1500.9 | 14.87 | 71.9 |
| 1111 | 20.0 | 1501.1 | 14.86 | 72.0 |
| 1111 | 30.0 | 1501.2 | 14.85 | 72.4 |
| 1111 | 39.0 | 1499.6 | 14.23 | 80.3 |
| 1111 | 45.0 | 1497.9 | 13.59 | 82.9 |
| 1111 | 50.0 | 1494.7 | 12.74 | 85.0 |
| 1111 | 55.0 | 1491.9 | 11.87 | 86.5 |
| 1111 | 65.0 | 1491.9 | 11.78 | 88.6 |
| 1111 | 74.0 | 1488.4 | 10.79 | 90.1 |
| 1111 | 85.0 | 1490.1 | 11.13 | 90.7 |
| 1111 | 100.0 | 1487.9 | 10.39 | 91.8 |

* RELATIVE VALUES ONLY

STATION: L-1 DEPTH: 1494 m
DATE: 13-11-69 TIME: 0245
LAT: 37°-36.8' LONG: 123°-15.5'
WIND DIR: 000° SPEED: 7
AIR TEMP(DRY): 58° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1201 | 0.0 | 1500.9 | 14.91 | 69.1 |
| 1201 | 10.0 | 1500.8 | 14.80 | 68.9 |
| 1201 | 21.0 | 1501.0 | 14.76 | 68.7 |
| 1201 | 29.0 | 1501.5 | 14.83 | 77.0 |
| 1201 | 34.0 | 1501.7 | 14.85 | 75.8 |
| 1201 | 45.0 | 1499.7 | 14.23 | 80.2 |
| 1201 | 49.0 | 1495.3 | 12.95 | 82.7 |
| 1201 | 60.0 | 1493.2 | 12.23 | 85.8 |
| 1201 | 69.0 | 1490.0 | 11.17 | 88.9 |
| 1201 | 79.0 | 1489.4 | 10.94 | 88.9 |
| 1201 | 90.0 | 1486.5 | 10.08 | 89.8 |
| 1201 | 100.0 | 1484.7 | 9.52 | 90.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: L-2 DEPTH: 185 m
DATE: 13-11-69 TIME: 0430
LAT: 37°-42.5' LONG: 123°-08.4'
WIND DIR: 000° SPEED: 7
AIR TEMP(DRY): 58° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1202 | 0.0 | 1499.7 | 14.42 | 69.2 |
| 1202 | 10.0 | 1499.5 | 14.33 | 70.2 |
| 1202 | 20.0 | 1499.1 | 14.15 | 75.3 |
| 1202 | 25.0 | 1498.3 | 13.87 | 77.6 |
| 1202 | 30.0 | 1494.9 | 12.79 | 81.7 |
| 1202 | 35.0 | 1493.7 | 12.40 | 81.7 |
| 1202 | 45.0 | 1493.0 | 12.13 | 78.2 |
| 1202 | 54.0 | 1491.6 | 11.67 | 64.6 |
| 1202 | 59.0 | 1491.2 | 11.53 | 62.5 |
| 1202 | 69.0 | 1491.0 | 11.71 | 53.4 |
| 1202 | 74.0 | 1490.9 | 11.38 | 52.2 |
| 1202 | 84.0 | 1491.1 | 11.37 | 51.7 |
| 1202 | 99.0 | 1490.8 | 11.22 | 52.9 |

STATION: L-3 DEPTH: 70 m
DATE:13-11-69 TIME: 0645
LAT: 37°-47.7' LONG: 123°-00.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT):-
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1203 | 0.0 | 1500.0 | 14.59 | 62.5 |
| 1203 | 10.0 | 1499.8 | 14.40 | 64.2 |
| 1203 | 19.0 | 1499.0 | 14.09 | 70.0 |
| 1203 | 25.0 | 1498.2 | 13.85 | 74.6 |
| 1203 | 30.0 | 1496.6 | 13.31 | 75.2 |
| 1203 | 40.0 | 1496.7 | 13.30 | 74.4 |
| 1203 | 50.0 | 1495.6 | 12.86 | 71.4 |
| 1203 | 59.0 | 1493.5 | 12.20 | 67.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: L-4 DEPTH: 56 m
DATE: 13-11-69 TIME: 0825
LAT: 37°-53.0' LONG: 122°-53.2'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1204 | 0.0 | 1499.5 | 14.37 | 63.0 |
| 1204 | 10.0 | 1499.5 | 14.29 | 63.7 |
| 1204 | 20.0 | 1499.5 | 14.22 | 68.8 |
| 1204 | 29.0 | 1497.7 | 13.67 | 75.2 |
| 1204 | 35.0 | 1497.7 | 13.61 | 75.5 |
| 1204 | 39.0 | 1497.7 | 13.58 | 73.3 |
| 1204 | 44.0 | 1497.2 | 13.41 | 52.0 |

* RELATIVE VALUES ONLY

STATION: M-1 DEPTH: 44 m
DATE: 13-11-69 TIME: 0945
LAT: 37°-53.0' LONG: 122°-48.7'
WIND DIR: 100° SPEED: 8
AIR TEMP(DRY): 64° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1301 | 0.0 | 1499.4 | 14.41 | 63.6 |
| 1301 | 5.0 | 1499.1 | 14.28 | 62.3 |
| 1301 | 9.0 | 1499.2 | 14.26 | 62.8 |
| 1301 | 13.0 | 1499.4 | 14.28 | 63.7 |
| 1301 | 19.0 | 1499.1 | 14.14 | 71.5 |
| 1301 | 24.0 | 1498.8 | 14.00 | 74.7 |
| 1301 | 28.0 | 1498.0 | 13.76 | 79.2 |
| 1301 | 34.0 | 1497.9 | 13.67 | 75.0 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: M-2 DEPTH: 48 m
DATE: 13-11-70 TIME: 1130
LAT: 37°-49.4' LONG: 122°-49.0'
WIND DIR: 090° SPEED: 22
AIR TEMP(DRY): 64° BARO: 30.10
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1302 | 0.0 | 1499.6 | 14.40 | 74.7 |
| 1302 | 10.0 | 1499.2 | 14.19 | 78.3 |
| 1302 | 18.0 | 1497.3 | 13.90 | 77.8 |
| 1302 | 27.0 | 1497.6 | 13.61 | 57.7 |
| 1302 | 38.0 | 1497.6 | 13.57 | 56.4 |

* RELATIVE VALUES ONLY

STATION: M-3 DEPTH: 43 m
DATE: 13-11-69 TIME: 1420
LAT: 37°-46.4' LONG: 122°-46.4'
WIND DIR: 130° SPEED: 10
AIR TEMP(DRY): 64° BARO: 30.09
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1303 | 1.0 | 1499.8 | 14.41 | 67.2 |
| 1303 | 6.0 | 1499.6 | 14.37 | 64.9 |
| 1303 | 12.0 | 1499.2 | 14.24 | 67.6 |
| 1303 | 16.0 | 1498.9 | 14.09 | 70.9 |
| 1303 | 21.0 | 1498.8 | 14.04 | 72.6 |
| 1303 | 25.0 | 1498.5 | 13.92 | 73.2 |
| 1303 | 31.0 | 1498.3 | 13.83 | 73.8 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: M-4 DEPTH: 40 m
DATE: 13-11-70 TIME: 1525
LAT: 37°-43.5' LONG: 122°-44.4'
WIND DIR: Var. SPEED:0-2
AIR TEMP(DRY): 62° BARO: 30.06
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1304 | 1.0 | 1499.1 | 14.28 | 74.6 |
| 1304 | 6.0 | 1498.7 | 14.12 | 76.1 |
| 1304 | 10.0 | 1498.4 | 13.94 | 77.8 |
| 1304 | 15.0 | 1497.9 | 13.79 | 66.3 |
| 1304 | 20.0 | 1497.8 | 13.74 | 65.3 |
| 1304 | 25.0 | 1497.8 | 13.67 | 60.7 |
| 1304 | 30.0 | 1497.3 | 13.52 | 57.5 |

* RELATIVE VALUES ONLY

STATION: M-5 DEPTH: 40 m
DATE: 13-11-69 TIME: 1630
LAT: 37°-40.3' LONG: 122°-42.6'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 62° BARO: 30.06
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1305 | 0.0 | 1499.7 | 14.44 | 68.7 |
| 1305 | 5.0 | 1499.0 | 14.68 | 67.1 |
| 1305 | 10.0 | 1498.4 | 13.97 | 69.8 |
| 1305 | 14.0 | 1498.3 | 13.91 | 76.6 |
| 1305 | 19.0 | 1497.7 | 13.75 | 74.7 |
| 1305 | 25.0 | 1497.0 | 13.47 | 66.3 |
| 1305 | 30.0 | 1496.6 | 13.27 | 60.9 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: M-6 DEPTH: 36 m
DATE: 13-11-69 TIME: 1745
LAT: 37°-37.8 LONG: 122°-40'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1306 | 0.0 | 1499.9 | 14.50 | 73.3 |
| 1306 | 9.0 | 1498.9 | 14.14 | 67.9 |
| 1306 | 20.0 | 1498.5 | 13.93 | 81.1 |
| 1306 | 25.0 | 1497.7 | 13.75 | 71.8 |
| 1306 | 28.0 | 1497.7 | 13.65 | 67.5 |

* RELATIVE VALUES ONLY

STATION: M-7 DEPTH: 32 m
DATE: 13-11-69 TIME: 1900
LAT: 37°-37.4' LONG: 122°-36.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 60° BARO: 30.08
CLOUD AMT: Clear HEIGHT(FT): -
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1307 | 0.0 | 1499.3 | 14.43 | 70.6 |
| 1307 | 10.0 | 1499.4 | 14.29 | 74.6 |
| 1307 | 15.0 | 1499.2 | 14.17 | 76.1 |
| 1307 | 20.0 | 1498.3 | 13.99 | 75.9 |
| 1307 | 24.0 | 1498.1 | 13.91 | 76.5 |

* RELATIVE VALUES ONLY

TABLE 1 (Cont.)

STATION: K-6a DEPTH: 68 m
DATE: 13-11-69 TIME: 2150
LAT: 37°-30.7' LONG: 122°-43.6'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 58° BARO: 30.06
CLOUD AMT: 7 HEIGHT(FT): 2000
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1106 | 0.0 | 1499.5 | 14.38 | 69.9 |
| 1106 | 5.0 | 1500.0 | 14.48 | 69.1 |
| 1106 | 10.0 | 1499.3 | 14.27 | 64.4 |
| 1106 | 15.0 | 1498.8 | 14.07 | 70.3 |
| 1106 | 20.0 | 1497.8 | 13.77 | 72.9 |
| 1106 | 25.0 | 1497.4 | 13.59 | 71.6 |
| 1106 | 31.0 | 1497.3 | 13.52 | 69.4 |
| 1106 | 40.0 | 1496.6 | 13.25 | 64.9 |
| 1106 | 51.0 | 1496.6 | 13.19 | 55.2 |
| 1106 | 55.0 | 1496.7 | 13.19 | 54.0 |

* RELATIVE VALUES ONLY

STATION: K-7 DEPTH: 66 m
DATE: 13-11-69 TIME: 2030
LAT: 37°-32.2' LONG: 122°-44.5'
WIND DIR: Var. SPEED: 0-2
AIR TEMP(DRY): 59° BARO: 30.08
CLOUD AMT: 10 HEIGHT(FT): 2000
SEA: - SWELL: -

| STA | Z (M) | SO VEL* (Z+1) | TEMP (C) | TRAN (%) |
|---|---|---|---|---|
| 1107 | 0.0 | 1500.2 | 14.54 | 67.3 |
| 1107 | 10.0 | 1499.9 | 14.45 | 67.3 |
| 1107 | 20.0 | 1499.4 | 14.22 | 66.9 |
| 1107 | 25.0 | 1499.4 | 14.20 | 66.6 |
| 1107 | 29.0 | 1499.3 | 14.13 | 67.4 |
| 1107 | 40.0 | 1497.5 | 13.56 | 68.7 |
| 1107 | 50.0 | 1496.5 | 13.18 | 56.8 |
| 1107 | 54.0 | 1496.6 | 13.16 | 56.8 |

* RELATIVE VALUES ONLY

TABLE 2

Coulter Particle Count (2ml sample) and Oxygen Content

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-1 | | | | | | | | | | |
| 7 Nov. | 0 | | 2474 | 899 | 727 | 381 | 148 | 90 | 80 | 24 | 53 | 8 | 6 | 28 |
| 1300 | 5 | | 1941 | 210 | 746 | 464 | 211 | 117 | 48 | 23 | 38 | 6 | 0 | 2 |
| | 10 | | 2742 | 1195 | 626 | 567 | 116 | 77 | 47 | 30 | 14 | 0 | 31 | 3 |
| | 20 | | 1904 | 676 | 631 | 86 | 262 | 146 | 44 | 9 | 4 | 13 | 12 | 3 |
| | 30 | | 3078 | 2076 | 560 | 242 | 86 | 43 | 19 | 7 | 16 | 0 | 4 | 6 |
| | 40 | | 1840 | 743 | 570 | 313 | 102 | 19 | 39 | 5 | 26 | 3 | 0 | 2 |
| | 50 | | 1505 | 147 | 734 | 375 | 98 | 61 | 30 | 12 | 13 | 9 | 2 | 4 |
| | 60 | | 1925 | 841 | 610 | 307 | 69 | 28 | 31 | 16 | 4 | 2 | 4 | 2 |
| | | | | STATION A-2 | | | | | | | | | | |
| 7 Nov. | 0 | 5.7744 | 2338 | 872 | 677 | 400 | 179 | 58 | 52 | 35 | 15 | 9 | 17 | 3 |
| 1700 | 10 | 5.8411 | 5212 | 2095 | 1264 | 802 | 560 | 209 | 99 | 18 | 54 | 36 | 41 | 0 |
| | 20 | 5.7971 | 3004 | 1363 | 857 | 418 | 190 | 64 | 0 | 39 | 28 | 9 | 6 | 6 |
| | 35 | 5.7658 | 1344 | 510 | 381 | 281 | 46 | 53 | 12 | 14 | 22 | 3 | 8 | 0 |
| | 45 | 5.5318 | 1556 | 855 | 376 | 205 | 42 | 31 | 14 | 6 | 6 | 7 | 2 | 5 |
| | 55 | 4.5664 | 1376 | 450 | 507 | 228 | 73 | 0 | 47 | 13 | 6 | 23 | 12 | 2 |

TABLE 2(Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-3 | | | | | | | | | | |
| 7 Nov. | 0 | 5.8261 | 3711 | 1449 | 1159 | 663 | 164 | 119 | 31 | 34 | 32 | 15 | 17 | 11 |
| 1930 | 20 | 5.6303 | 2343 | 759 | 850 | 381 | 214 | 45 | 23 | 24 | 15 | 13 | 4 | 0 |
| | 30 | 5.6781 | 2029 | 1133 | 434 | 319 | 59 | 35 | 0 | 4 | 19 | 8 | 9 | 0 |
| | 40 | 5.6781 | 2479 | 1399 | 665 | 236 | 87 | 34 | 11 | 22 | 0 | 14 | 0 | 0 |
| | 45 | 5.6498 | 1115 | 387 | 381 | 214 | 59 | 4 | 20 | 5 | 10 | 10 | 7 | 2 |
| | 50 | 5.6337 | 1834 | 845 | 480 | 302 | 100 | 13 | 26 | 12 | 18 | 12 | 2 | 3 |
| | 55 | 5.6519 | 1952 | 937 | 504 | 320 | 62 | 35 | 19 | 13 | 20 | 15 | 2 | 7 |
| | 70 | 5.6576 | 1520 | 845 | 334 | 207 | 66 | 17 | 6 | 9 | 11 | 10 | 9 | |
| | | | | STATION A-4 | | | | | | | | | | |
| 7 Nov. | 0 | 5.6501 | 2162 | 1036 | 519 | 374 | 108 | 39 | 27 | 8 | 10 | 8 | 16 | |
| 2130 | 10 | 5.7280 | 1278 | 480 | 414 | 219 | 59 | 27 | 9 | 22 | 7 | 11 | 5 | 1 |
| | 35 | 5.4513 | 1686 | 774 | 517 | 214 | 87 | 15 | 35 | 16 | 5 | 5 | 5 | |
| | 45 | 5.3938 | 1466 | 720 | 398 | 171 | 63 | 52 | | 12 | 14 | 14 | 5 | 5 |
| | 65 | 5.0881 | 1304 | 705 | 329 | 160 | 46 | 21 | 9 | 2 | 5 | | 14 | 2 |
| | 70 | 5.3078 | 964 | 520 | 215 | 126 | 42 | 25 | 4 | 2 | 8 | 7 | | 6 |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-5 | | | | | | | | | | |
| 7 Nov. | 0 | 5.6748 | 916 | 259 | 305 | 212 | 57 | 28 | 20 | 4 | 8 | | | |
| 2330 | 30 | ------ | 1865 | 911 | 527 | 243 | 69 | 48 | 18 | 19 | 9 | | 8 | 5 |
| | 50 | 5.3613 | 1534 | 658 | 537 | 189 | 79 | 13 | 26 | 10 | | | | |
| | 60 | 5.4509 | 1118 | 232 | 472 | 269 | 51 | 34 | 22 | 2 | 11 | 11 | 1 | 1 |
| | 70 | 5.3531 | 3330 | 2723 | 315 | 142 | 60 | 30 | 5 | 22 | 10 | 5 | 7 | |
| | 95 | 5.1036 | 8139 | 6179 | 1325 | 392 | 137 | 46 | 26 | 5 | 1 | | 17 | 2 |
| | 100 | 4.5847 | 8944 | 6148 | 1422 | 989 | 186 | 100 | 44 | 12 | 10 | 8 | 7 | |
| | | | | STATION A-6 | | | | | | | | | | |
| 8 Nov. | 0 | 5.7055 | 1302 | 853 | 244 | 107 | 27 | 13 | 17 | 10 | 7 | 3 | 1 | 13 |
| 0100 | 16 | 5.4967 | 2521 | 1839 | 387 | 156 | 57 | 21 | 20 | | | | | |
| | 32 | 5.3762 | 1996 | 1402 | 313 | 147 | 57 | 27 | 15 | | | | | |
| | 41 | 5.1718 | 2050 | 1512 | 291 | 111 | 69 | 12 | 25 | 3 | 13 | 3 | 2 | 3 |
| | 55 | 5.2514 | 1560 | 901 | 342 | 213 | 25 | 23 | 25 | | | | | |
| | 70 | 5.5813 | 2054 | 1395 | 356 | 149 | 66 | 11 | 16 | 2 | 30 | | | |
| | 80 | 5.3306 | 1970 | 1431 | 283 | 124 | 66 | 17 | 11 | 5 | 6 | 14 | | |
| | 95 | 5.2341 | 4226 | 2540 | 1010 | 419 | 138 | 32 | 39 | 15 | 6 | 10 | 9 | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-7 | | | | | | | | | | |
| 8 Nov. | 0 | 5.7017 | 2157 | 1558 | 282 | 181 | 60 | 2 | 23 | 11 | 13 | | | |
| 0330 | 5 | 5.6250 | 1456 | 970 | 300 | 73 | 48 | 15 | 16 | 3 | | | | |
| | 20 | 5.5700 | 1826 | 1308 | 257 | 123 | 63 | 9 | 18 | 17 | 7 | | | |
| | 35 | 5.4011 | 1992 | 1459 | 246 | 162 | 50 | 23 | 21 | 4 | 4 | 6 | 6 | 1 |
| | 50 | 5.3413 | 988 | 550 | 177 | 48 | 55 | 21 | 17 | | | | | |
| | 60 | 5.3163 | 470 | 282 | 62 | 64 | 16 | 21 | 4 | | | | | |
| | 75 | 5.2044 | 1437 | 994 | 217 | 137 | 35 | 21 | | | | | | |
| | 80 | 5.2265 | 1485 | 1090 | 207 | 102 | 40 | 13 | 6 | 9 | | | | |
| | 95 | 5.1567 | 1931 | 1356 | 132 | 51 | 20 | 7 | 8 | | | | | |
| | 105 | 5.1546 | 3383 | 2626 | 467 | 181 | 41 | 24 | 6 | 11 | 5 | 10 | | |
| | | | | STATION A-8 | | | | | | | | | | |
| 8 Nov. | 0 | 5.5674 | 791 | 346 | 211 | 122 | 21 | 39 | 7 | 14 | 5 | 5 | 8 | |
| 0530 | 20 | 5.6758 | 1366 | 892 | 285 | 86 | 27 | 32 | 20 | | | | | |
| | 35 | 5.2899 | 1572 | 1063 | 246 | 146 | 43 | 36 | 3 | 13 | 2 | 4 | 6 | 7 |
| | 40 | 5.3435 | 894 | 501 | 210 | 96 | 35 | 7 | 19 | | | | | |
| | 45 | 5.3200 | 952 | 579 | 155 | 133 | 46 | 1 | 10 | 8 | 4 | | | |
| | 50 | 5.2975 | 349 | 181 | 80 | 36 | 24 | 9 | 4 | 5 | | | | |
| | 60 | 5.3020 | 1046 | 667 | 188 | 129 | 15 | 13 | 8 | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-9 | | | | | | | | | | |
| 8 Nov. | 0 | 5.5465 | 1492 | 726 | 343 | 256 | 67 | 38 | 25 | 3 | 12 | 5 | 9 | 4 |
| 0630 | 15 | 5.5820 | 464 | 162 | 154 | 52 | 41 | 19 | 5 | 11 | 4 | | | |
| | 25 | 5.3243 | 943 | 488 | 238 | 106 | 44 | 20 | 14 | 14 | | | | |
| | 30 | 5.2868 | 1078 | 711 | 192 | 109 | 10 | 22 | 12 | 5 | 2 | | | |
| | 40 | 5.1922 | 610 | 264 | 139 | 134 | 47 | | | | | | | |
| | | | | STATION A-10 | | | | | | | | | | |
| 8 Nov. | 0 | 4.6468 | 1048 | 539 | 179 | 132 | 102 | 29 | 24 | 24 | | | | |
| 0800 | 15 | 4.7714 | 766 | 477 | 90 | 120 | 18 | 20 | 21 | 5 | 3 | 2 | | |
| | 20 | 5.3094 | 1353 | 844 | 261 | 124 | 18 | 28 | 35 | 13 | | | | |
| | 25 | 4.7681 | 1110 | 460 | 342 | 188 | 33 | 31 | 18 | | | | | |
| | 30 | 4.8430 | 4693 | 2574 | 1148 | 516 | 247 | 81 | 41 | 15 | 21 | 12 | 18 | 3 |
| | | | | STATION A-11 | | | | | | | | | | |
| 8 Nov. | 0 | 5.7269 | 2182 | 236 | 855 | 680 | 37 | 182 | 15 | 78 | | | | |
| 0930 | 5 | 5.6677 | 2958 | 941 | 1072 | 459 | 231 | 144 | 17 | 43 | | | | |
| | 10 | 5.6661 | 2530 | 741 | 1063 | 338 | 171 | 49 | 60 | 5 | | | | |
| | 15 | 5.6380 | 3178 | 1002 | 1240 | 483 | 122 | 155 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION A-12 | | | | | | | | | | |
| 8 Nov. | 0 | 5.6933 | 4326 | 381 | 1036 | 2199 | 911 | 9 | | | | | | |
| 1045 | 5 | 5.6988 | 5829 | 878 | 2174 | 1376 | 721 | 331 | | | | | | |
| | 10 | 5.8145 | 7650 | 44 | 3369 | 2082 | 485 | 385 | 80 | 86 | | | | |
| | | | | STATION B-1 | | | | | | | | | | |
| 8 Nov. | 0 | | 6330 | 2596 | 1564 | 1433 | 209 | 275 | 10 | | | | | |
| 1230 | 5 | | 3319 | 84 | 1280 | 986 | 433 | 273 | 58 | 50 | 94 | | | |
| | 10 | | 4780 | 767 | 1815 | 1353 | 537 | 2 | | | | | | |
| | | | | STATION B-2 | | | | | | | | | | |
| 8 Nov. | 0 | 5.5915 | 1376 | 199 | 453 | 459 | 68 | 68 | 18 | | | | | |
| 1330 | 10 | 5.7574 | 1307 | 209 | 640 | 337 | 94 | 5 | | | | | | |
| | 15 | 5.5941 | 1880 | 614 | 509 | 465 | 130 | 35 | 8 | | | | | |
| | 20 | 5.7033 | 1520 | 577 | 492 | 275 | 10 | | | | | | | |
| | | | | STATION B-3 | | | | | | | | | | |
| 8 Nov. | 0 | 5.7088 | 1549 | 782 | 391 | 250 | 26 | 19 | 14 | | | | | |
| 1430 | 10 | 5.6844 | 1498 | 821 | 320 | 188 | 28 | 26 | 50 | 5 | | | | |
| | 20 | 5.7517 | 1873 | 1132 | 388 | 190 | 49 | 48 | 10 | | | | | |
| | 25 | 5.7110 | 2097 | 1196 | 416 | 319 | 89 | | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION B-4 | | | | | | | | | | |
| 8 Nov | 0 | 5.6524 | 1120 | 265 | 439 | 250 | 75 | | | | | | | |
| 1545 | 20 | 5.5562 | 1214 | 278 | 544 | 297 | 9 | | | | | | | |
| | 25 | 5.4198 | 1650 | 712 | 532 | 267 | 54 | 20 | 6 | | | | | |
| | 30 | 5.4221 | 1978 | 1346 | 301 | 191 | 39 | 58 | | | | | | |
| | 40 | 5.3826 | 1772 | 1054 | 431 | 127 | 86 | 15 | 20 | 8 | | | | |
| | 45 | 5.1805 | 1947 | 1031 | 454 | 304 | 62 | 28 | 10 | | | | | |
| | 50 | 5.1805 | 3529 | 2032 | 762 | 424 | 122 | 2 | | | | | | |
| | | | | STATION B-5 | | | | | | | | | | |
| 8 Nov. | 0 | | 1070 | 496 | 304 | 147 | 28 | 31 | 10 | | | | | |
| 1715 | 15 | | 2856 | 1630 | 757 | 271 | 107 | 24 | 18 | | | | | |
| | 45 | | 1692 | 1083 | 347 | 156 | 45 | 6 | | | | | | |
| | 55 | | 1546 | 739 | 441 | 218 | 69 | 34 | | | | | | |
| | 60 | | 2524 | 1182 | 749 | 290 | 166 | 73 | | | | | | |
| | 70 | | 2763 | 1245 | 890 | 507 | 132 | | | | | | | |
| | | | | STATION B-6 | | | | | | | | | | |
| 8 Nov. | | | | | | | | | | | | | | |
| 1900 | 0 | 5.4773 | 1254 | 773 | 281 | 115 | 23 | 24 | 4 | | | | | |
| | 35 | 5.6553 | 1197 | 820 | 235 | 70 | 28 | 3 | | | | | | |
| | 45 | 5.5769 | 1338 | 1036 | 181 | 51 | 38 | | | | | | | |
| | 65 | 5.4756 | 1350 | 980 | 221 | 86 | 15 | 3 | | | | | | |
| | 70 | 5.5094 | 2571 | 1480 | 696 | 252 | 54 | 35 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION B-7 | | | | | | | | | | |
| 8 Nov. | 0 | 5.7849 | 1078 | 687 | 221 | 89 | 35 | | | | | | | |
| 2100 | 25 | | 1212 | 784 | 229 | 110 | 36 | 17 | 10 | | | | | |
| | 50 | 5.4010 | 2100 | 1126 | 608 | 241 | 49 | 30 | 21 | | | | | |
| | 60 | 5.4486 | 1845 | 1110 | 434 | 205 | 47 | 8 | | | | | | |
| | 70 | 5.1848 | 1988 | 1139 | 429 | 295 | 27 | 34 | 19 | 23 | 8 | | | |
| | 90 | 4.3253 | 4714 | 3346 | 778 | 377 | 138 | | | | | | | |
| | 100 | 3.9902 | 2021 | 1160 | 520 | 226 | 29 | 37 | 8 | | | | | |
| | | | | STATION B-8 | | | | | | | | | | |
| 8 Nov. | 0 | 5.6018 | 1415 | 938 | 261 | 105 | 45 | 10 | | | | | | |
| 2300 | 30 | 5.6157 | 896 | 550 | 161 | 104 | 23 | 19 | 1 | | | | | |
| | 60 | 4.8136 | 1010 | 471 | 348 | 111 | 31 | 14 | 8 | | | | | |
| | 75 | 4.6346 | 1577 | 978 | 344 | 157 | 15 | 18 | 14 | 10 | | | | |
| | 80 | 4.2526 | 1756 | 1140 | 304 | 195 | 62 | 14 | 3 | | | | | |
| | | | | STATION B-9 | | | | | | | | | | |
| 9 Nov. | 0 | 5.6928 | 1166 | 652 | 270 | 94 | 64 | 9 | | | | | | |
| 0200 | 20 | 5.4843 | 1035 | 504 | 251 | 150 | 33 | 4 | | | | | | |
| | 40 | 5.6986 | 1444 | 822 | 320 | 170 | 35 | 40 | 5 | | | | | |
| | 60 | 5.3790 | 890 | 479 | 136 | 132 | 71 | 3 | | | | | | |
| | 80 | 5.2945 | 1446 | 490 | 264 | 73 | 20 | 56 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION B-10 | | | | | | | | | | |
| 9 Nov. | 0 | 5.7743 | 698 | 218 | 191 | 156 | 43 | 22 | 22 | 1 | | | | |
| 0322 | 20 | 5.7011 | 1136 | 613 | 236 | 157 | 29 | 33 | 14 | 22 | 2 | | | |
| | 40 | 5.7354 | 744 | 328 | 202 | 80 | 36 | 47 | | | | | | |
| | 50 | 5.4366 | 1368 | 588 | 416 | 216 | 30 | 8 | | | | | | |
| | 75 | 5.4838 | 1236 | 527 | 306 | 212 | 70 | 37 | 38 | 6 | | | | |
| | 100 | 4.8694 | 1160 | 769 | 175 | 105 | 55 | 25 | | | | | | |
| | | | | STATION B-11 | | | | | | | | | | |
| 9 Nov. | 0 | 5.4943 | 1113 | 620 | 219 | 133 | 78 | | | | | | | |
| 0531 | 20 | 5.6438 | 489 | 110 | 139 | 134 | 5 | | | | | | | |
| | 40 | 5.5899 | 1230 | 794 | 182 | 122 | 58 | 11 | | | | | | |
| | 60 | 5.4370 | 3136 | 2087 | 544 | 311 | 107 | 15 | | | | | | |
| | 80 | 5.3888 | 893 | 452 | 216 | 107 | 32 | 9 | | | | | | |
| | | | | STATION B-12 | | | | | | | | | | |
| 9 Nov. | 0 | 5.5561 | 1384 | 870 | 194 | 152 | 83 | | | | | | | |
| 0704 | 15 | 5.5637 | 2241 | 1508 | 310 | 217 | 67 | 28 | 17 | | | | | |
| | 40 | 5.4235 | 1470 | 884 | 282 | 146 | 68 | 9 | | | | | | |
| | 60 | 5.4039 | 1905 | 1289 | 312 | 145 | 76 | 8 | | | | | | |
| | 75 | 4.9455 | 1742 | 1053 | 301 | 206 | 84 | 10 | | | | | | |
| | 85 | 4.8843 | 2760 | 2024 | 222 | 316 | 76 | 4 | | | | | | |
| | 95 | 4.6589 | 2778 | 1659 | 440 | 347 | 128 | 95 | 10 | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION B-13 | | | | | | | | | | |
| 9 Nov. | 0 | 5.6273 | 2072 | 1334 | 369 | 175 | 86 | 12 | | | | | | |
| 0704 | 30 | 5.5276 | 2037 | 963 | 512 | 250 | 152 | 49 | 35 | | | | | |
| | 60 | 5.0902 | 2460 | 1397 | 606 | 252 | 64 | 47 | 41 | | | | | |
| | | | | STATION C-1 | | | | | | | | | | |
| 9 Nov. | 0 | 5.8886 | 2532 | 1875 | 326 | 203 | 32 | 26 | 9 | | | | | |
| 1020 | 20 | 5.6744 | 1358 | 923 | 181 | 141 | 13 | 39 | 1 | | | | | |
| | 70 | 5.1446 | 1684 | 1220 | 205 | 139 | 46 | 17 | 13 | | | | | |
| | 75 | 5.0665 | 1000 | 683 | 133 | 106 | 35 | 6 | | | | | | |
| | 90 | 4.7116 | 1406 | 734 | 331 | 237 | 28 | 35 | | | | | | |
| | | | | STATION C-2 | | | | | | | | | | |
| 9 Nov. | 0 | 5.0735 | 1859 | 1377 | 176 | 163 | 54 | 23 | 18 | 5 | | | | |
| 1158 | 20 | 5.4261 | 2006 | 1503 | 240 | 118 | 73 | 11 | | | | | | |
| | 35 | 4.7326 | 2358 | 892 | 832 | 377 | 165 | 12 | | | | | | |
| | 55 | 5.0529 | 1205 | 868 | 207 | 62 | 21 | 11 | | | | | | |
| | 80 | 4.0654 | 956 | 635 | 169 | 76 | 28 | 13 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION C-3 | | | | | | | | | | |
| 9 Nov. | 0 | 5.8262 | 3168 | 2139 | 531 | 265 | 84 | 52 | 37 | 4 | | | | |
| 1338 | 35 | 5.7141 | 1950 | 1105 | 447 | 215 | 76 | 42 | 17 | 2 | | | | |
| | 40 | 5.6281 | 1896 | 1185 | 473 | 147 | 24 | 21 | 10 | | | | | |
| | 70 | 4.0485 | 899 | 640 | 62 | 102 | 53 | | | | | | | |
| | 80 | 3.5742 | 818 | 546 | 154 | 45 | 38 | 7 | | | | | | |
| | | | | STATION D-1 | | | | | | | | | | |
| 9 Nov. | 0 | 5.8294 | 1366 | 791 | 202 | 200 | 53 | 23 | 18 | 18 | | | | |
| 1522 | 10 | 5.8681 | 1939 | 1206 | 360 | 173 | 87 | 5 | | | | | | |
| | 40 | 5.6652 | 1515 | 1079 | 223 | 135 | 8 | | | | | | | |
| | 45 | 5.2504 | 1443 | 1116 | 167 | 80 | 36 | 1 | | | | | | |
| | 50 | 4.7459 | 641 | 412 | 127 | 62 | 2 | | | | | | | |
| | 60 | 4.4597 | 920 | 638 | 148 | 76 | 3 | | | | | | | |
| | | | | STATION D-2 | | | | | | | | | | |
| 9 Nov. | 0 | 5.8642 | 1170 | 700 | 203 | 137 | 55 | 3 | | | | | | |
| 1710 | 10 | 5.9840 | 748 | 430 | 152 | 75 | 15 | | | | | | | |
| | 60 | 4.4964 | 1395 | 1068 | 145 | 87 | 32 | 26 | 3 | | | | | |
| | 80 | 4.2161 | 472 | 280 | 36 | 86 | 5 | | | | | | | |
| | 90 | 3.5203 | 352 | 194 | 30 | 55 | 17 | 10 | | | | | | |
| | 95 | 3.5810 | 304 | 183 | 42 | 31 | 21 | | | | | | | |
| | 100 | 3.0412 | 516 | 354 | 76 | 58 | 17 | 3 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION D-3 | | | | | | | | | | |
| 9 Nov. 1901 | 0 | 5.9075 | 1066 | 648 | 197 | 62 | 25 | .46 | | | | | | |
| | 15 | 6.0049 | 950 | 649 | 118 | 61 | 43 | 6 | | | | | | |
| | 30 | 5.9599 | 1766 | 1066 | 288 | 142 | 84 | 50 | | | | | | |
| | 40 | 5.8367 | 511 | 278 | 145 | 25 | 20 | 10 | | | | | | |
| | 45 | 5.8228 | 435 | 313 | 39 | 38 | 18 | 5 | | | | | | |
| | 50 | 5.3460 | 360 | 226 | 27 | 58 | 14 | 10 | | | | | | |
| | 75 | 4.1650 | 396 | 273 | 54 | 35 | 10 | | | | | | | |
| | 100 | 4.7434 | 238 | 164 | 18 | 31 | 8 | | | | | | | |
| | | | | STATION E-1 | | | | | | | | | | |
| 9 Nov. 2039 | 0 | 5.8892 | 1138 | 710 | 173 | 128 | 24 | 18 | 15 | | | | | |
| | 20 | 5.4294 | 1566 | 1197 | 161 | 120 | 8 | | | | | | | |
| | 30 | 5.7130 | 1137 | 916 | 77 | 77 | 30 | 2 | | | | | | |
| | 40 | 5.0766 | 351 | 239 | 38 | 24 | 6 | | | | | | | |
| | 50 | 4.5290 | 450 | 278 | 88 | 44 | 16 | 3 | | | | | | |
| | 70 | 4.0530 | 252 | 165 | 32 | 26 | | | | | | | | |
| | 100 | 3.3431 | 272 | 167 | 46 | 16 | 21 | | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION E-2 | | | | | | | | | | |
| 9 Nov. | 0 | 5.8192 | 747 | 445 | 145 | 79 | 18 | | | | | | | |
| 2214 | 10 | 5.8061 | 871 | 500 | 203 | 72 | 28 | 22 | 10 | | | | | |
| | 20 | 5.7678 | 417 | 218 | 76 | 59 | 24 | 10 | | | | | | |
| | 30 | 5.6716 | 465 | 241 | 81 | 74 | 11 | | | | | | | |
| | 40 | 5.3577 | 404 | 235 | 55 | 49 | 24 | 22 | | | | | | |
| | 70 | 4.2371 | 404 | 247 | 66 | 50 | | | | | | | | |
| | 100 | 3.3087 | 688 | 477 | 91 | 66 | 17 | | | | | | | |
| | | | | STATION E-3 | | | | | | | | | | |
| 9 Nov. | 0 | 6.0372 | 677 | 464 | 64 | 68 | 10 | | | | | | | |
| 2325 | 5 | 5.2403 | 791 | 595 | 92 | 41 | 19 | 19 | | | | | | |
| | 10 | 5.1841 | 532 | 347 | 61 | 44 | 33 | 10 | | | | | | |
| | 20 | 5.7457 | 388 | 224 | 49 | 60 | 8 | | | | | | | |
| | 30 | 5.7498 | 856 | 644 | 48 | 78 | 22 | 10 | | | | | | |
| | 40 | 5.4026 | 785 | 528 | 111 | 94 | | | | | | | | |
| | 50 | 5.5433 | 864 | 621 | 111 | 40 | 24 | 34 | 5 | | | | | |
| | 60 | 4.2710 | 334 | 202 | 63 | 34 | 3 | | | | | | | |
| | | | | STATION E-4 | | | | | | | | | | |
| 10 Nov. | 0 | | 1010 | 473 | 270 | 142 | 15 | 38 | 9 | | | | | |
| 0110 | 20 | | 760 | 501 | 134 | 60 | 20 | 16 | 14 | | | | | |
| | 60 | | 1390 | 874 | 242 | 171 | 46 | 18 | 23 | | | | | |
| | 65 | | 1180 | 672 | 217 | 167 | 67 | | | | | | | |
| | 70 | | 1807 | 1126 | 314 | 217 | 81 | 5 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION E-5 | | | | | | | | | | |
| 10 Nov. 0246 | 0 | 5.7923 | 1382 | 802 | 299 | 77 | 71 | 37 | 1 | | | | | |
| | 10 | 5.5200 | 1336 | 851 | 238 | 51 | 105 | 15 | 15 | | | | | |
| | 40 | 5.4325 | 614 | 295 | 171 | 82 | 18 | 1 | | | | | | |
| | 45 | 5.1254 | 1010 | 600 | 162 | 137 | 60 | | | | | | | |
| | 50 | 5.1420 | 2346 | 1414 | 419 | 313 | 92 | | | | | | | |
| | | | | STATION E-6 | | | | | | | | | | |
| 10 Nov. 0405 | 0 | 5.7316 | 1143 | 667 | 216 | 130 | 22 | 23 | 1 | | | | | |
| | 15 | 5.7272 | 844 | 439 | 155 | 138 | 42 | 1 | | | | | | |
| | 25 | 5.3896 | 994 | 676 | 145 | 103 | 37 | | | | | | | |
| | 30 | 5.3222 | 1198 | 712 | 254 | 123 | 53 | | | | | | | |
| | | | | STATION E-7 | | | | | | | | | | |
| 10 Nov. 0511 | 0 | 5.6988 | 1186 | 748 | 170 | 130 | 32 | 18 | 12 | | | | | |
| | 10 | 5.6585 | 1003 | 560 | 158 | 173 | 34 | 1 | | | | | | |
| | 15 | 5.5410 | 864 | 557 | 158 | 88 | 16 | 5 | | | | | | |
| | 20 | 5.5158 | 730 | 505 | 101 | 53 | 24 | 2 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION F-1 | | | | | | | | | | |
| 10 Nov. | 0 | 5.8144 | 1292 | 727 | 233 | 135 | 86 | | | | | | | |
| 1113 | 10 | 5.7397 | 1041 | 552 | 137 | 45 | 80 | 4 | | | | | | |
| | 20 | 5.8335 | 918 | 495 | 162 | 155 | 20 | 18 | | | | | | |
| | 25 | 5.7170 | 942 | 444 | 262 | 118 | 42 | 24 | 8 | | | | | |
| | | | | STATION F-2 | | | | | | | | | | |
| 10 Nov. | 0 | 5.5448 | 1549 | 900 | 194 | 299 | 50 | 12 | | | | | | |
| 1236 | 15 | 6.0371 | 1699 | 950 | 294 | 264 | 84 | 3 | | | | | | |
| | 20 | 5.6900 | 2208 | 1066 | 571 | 311 | 113 | | | | | | | |
| | 25 | 5.6768 | 2101 | 701 | 263 | 576 | 203 | 27 | 161 | 91 | | | | |
| | | | | STATION F-3 | | | | | | | | | | |
| 10 Nov. | 0 | 5.8273 | 1960 | 966 | 472 | 312 | 110 | 3 | | | | | | |
| 1345 | 5 | 5.9422 | 3936 | 1979 | 958 | 666 | 154 | 60 | 18 | 53 | | | | |
| | 10 | 5.9603 | 4314 | 2032 | 1153 | 647 | 284 | 37 | 74 | | | | | |
| | 15 | 5.8268 | 4843 | 2664 | 487 | 1212 | 286 | 59 | 61 | 5 | | | | |
| | | | | STATION G-1 | | | | | | | | | | |
| 10 Nov. | 0 | 5.9840 | 1430 | 989 | 193 | 109 | 39 | 6 | | | | | | |
| 1450 | 20 | 5.8898 | 1135 | 827 | 154 | 73 | 31 | 9 | | | | | | |
| | 30 | 5.6948 | 1684 | 1063 | 225 | 201 | 98 | 16 | 38 | | | | | |
| | 40 | 5.6323 | 2187 | 1272 | 342 | 308 | 127 | 78 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION G-2 | | | | | | | | | | |
| 10 Nov. 1600 | 0 | 5.8148 | 1647 | 1130 | 268 | 102 | 22 | 24 | | | | | | |
| | 15 | 5.2417 | 1322 | 1045 | 111 | 94 | 3 | | | | | | | |
| | 20 | 5.5762 | 949 | 634 | 136 | 91 | 19 | 7 | | | | | | |
| | 25 | 5.3972 | 1146 | 803 | 202 | 70 | 32 | 11 | | | | | | |
| | 40 | 5.3294 | 3571 | 2177 | 607 | 493 | 127 | 34 | 73 | | | | | |
| | | | | STATION G-3 | | | | | | | | | | |
| 10 Nov. 1745 | 0 | 5.8926 | 1131 | 754 | 128 | 130 | 16 | | | | | | | |
| | 25 | 5.8895 | 1259 | 862 | 185 | 85 | 30 | 10 | | | | | | |
| | 35 | 5.7870 | 606 | 422 | 86 | 34 | 34 | | | | | | | |
| | 45 | 5.6851 | 1014 | 802 | 99 | 35 | 11 | | | | | | | |
| | 60 | 5.2915 | 564 | 403 | 60 | 52 | 4 | | | | | | | |
| | 65 | 5.1268 | 2384 | 1697 | 383 | 158 | 78 | 18 | 15 | | | | | |
| | 70 | 4.9629 | 1677 | 1146 | 273 | 160 | 44 | 9 | | | | | | |
| | 80 | | 1189 | 787 | 145 | 118 | 28 | 32 | | | | | | |
| | | | | STATION G-4 | | | | | | | | | | |
| 10 Nov. 1920 | 0 | 5.8462 | 803 | 689 | 72 | 93 | 16 | | | | | | | |
| | 40 | 3.3941 | 774 | 559 | 48 | 77 | 51 | | | | | | | |
| | 65 | 4.1181 | 1574 | 1257 | 143 | 102 | 26 | 5 | | | | | | |
| | 70 | 3.6541 | 1813 | 1270 | 242 | 171 | 60 | | | | | | | |
| | 90 | 2.6533 | 1903 | 1314 | 263 | 161 | 88 | | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION G-5 | | | | | | | | | | |
| 10 Nov. | 0 | 5.9478 | 1186 | 786 | 113 | 166 | 8 | | | | | | | |
| 2145 | 40 | 5.2305 | 532 | 398 | 44 | 23 | 14 | 15 | | | | | | |
| | 50 | 4.1112 | 424 | 261 | 37 | 71 | 10 | | | | | | | |
| | 60 | 3.3104 | 418 | 341 | 55 | 65 | 33 | | | | | | | |
| | 75 | 3.1445 | 1514 | 965 | 268 | 154 | 66 | | | | | | | |
| | 95 | 3.2224 | 1000 | 574 | 198 | 156 | 31 | | | | | | | |
| | | | | STATION G-6 | | | | | | | | | | |
| 10 Nov. | 0 | 5.7508 | 1268 | 961 | 133 | 78 | 8 | 32 | 6 | 19 | 2 | 15 | 5 | 9 |
| 2343 | 30 | 5.7872 | 936 | 747 | 60 | 67 | 23 | | | | | | | |
| | 60 | 3.4342 | 927 | 635 | 159 | 75 | 16 | 19 | 9 | 5 | | | | |
| | 90 | 3.2662 | 663 | 392 | 145 | 78 | 14 | 22 | 2 | | | | | |
| | 100 | 3.1061 | 653 | 201 | 264 | 102 | 43 | 12 | 9 | 10 | 3 | | | |
| | | | | STATION G-7 | | | | | | | | | | |
| 11 Nov. | 0 | 5.9317 | 320 | 185 | 75 | 25 | 6 | 18 | | | | | | |
| 0143 | 10 | 5.9581 | 360 | 207 | 77 | 40 | 8 | 10 | 5 | | | | | |
| | 20 | 5.8906 | 786 | 576 | 77 | 74 | 7 | 14 | | | | | | |
| | 30 | 5.8764 | 1245 | 873 | 257 | 61 | 6 | 17 | 13 | | | | | |
| | 60 | 4.0466 | 854 | 589 | 136 | 72 | 22 | | | | | | | |
| | 100 | 3.2441 | 1122 | 737 | 222 | 89 | 18 | 10 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION H-1 | | | | | | | | | | |
| 11 Nov. | 0 | 5.6899 | 1378 | 924 | 210 | 78 | 69 | 36 | 18 | 9 | | | | |
| 0559 | 15 | 6.0817 | 1035 | 751 | 92 | 119 | 18 | 13 | 4 | | | | | |
| | 25 | | 1032 | 719 | 120 | 101 | 6 | | | | | | | |
| | 35 | 5.6355 | 582 | 401 | 70 | 54 | 17 | 6 | 15 | | | | | |
| | 100 | 3.8533 | 176 | 48 | 55 | 19 | 7 | 7 | | | | | | |
| | | | | STATION H-2 | | | | | | | | | | |
| 11 Nov. | 0 | 5.9058 | 1500 | 892 | 249 | 158 | 83 | 32 | 11 | 29 | 4 | 5 | 18 | 2 |
| 0817 | 15 | 5.7390 | 1077 | 562 | 242 | 96 | 93 | 17 | 15 | 17 | 3 | | | |
| | 30 | 5.5778 | 900 | 582 | 134 | 115 | 24 | 15 | | | | | | |
| | 50 | 5.3898 | 324 | 94 | 133 | 48 | 26 | 6 | | | | | | |
| | 100 | 3.2146 | 173 | 69 | 39 | 33 | 5 | 10 | 8 | | | | | |
| | | | | STATION I-1 | | | | | | | | | | |
| 11 Nov. | 0 | 5.3032 | 1193 | 874 | 162 | 94 | 22 | | | | | | | |
| 1123 | 30 | 4.9591 | 674 | 543 | 96 | 79 | 4 | | | | | | | |
| | 35 | 4.4959 | 531 | 219 | 116 | 133 | 4 | | | | | | | |
| | 40 | 4.2616 | 1265 | 760 | 254 | 165 | 33 | 19 | 12 | 8 | | | | |
| | 70 | 4.0148 | 2680 | 1173 | 828 | 453 | 104 | 53 | 13 | 17 | 7 | 22 | | |
| | 75 | 3.2128 | 1132 | 214 | 461 | 275 | 108 | 40 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION I-2 | | | | | | | | | | |
| 11 Nov. | 0 | 5.7718 | 1123 | 728 | 203 | 105 | 15 | 31 | 2 | | | | | |
| 1310 | 20 | 5.7202 | 826 | 586 | 83 | 92 | 15 | 21 | | | | | | |
| | 35 | 5.1128 | 1620 | 695 | 395 | 315 | 140 | 32 | 10 | | | | | |
| | 45 | 5.0003 | 2344 | 1486 | 443 | 271 | 86 | 23 | 15 | 9 | | | | |
| | 50 | 4.9365 | 1731 | 787 | 551 | 280 | 44 | 32 | 18 | | | | | |
| | 75 | 4.6648 | 2394 | 1181 | 684 | 357 | 106 | 29 | 12 | 7 | 9 | 1 | | |
| | | | | STATION I-3 | | | | | | | | | | |
| 11 Nov. | 0 | 5.7708 | 1080 | 479 | 264 | 174 | 66 | 4 | 6 | 19 | 28 | | | |
| 2040 | 15 | 5.7045 | 686 | 517 | 73 | 49 | 11 | 14 | | | | | | |
| | 30 | 5.5015 | 316 | 149 | 70 | 51 | 20 | 5 | | | | | | |
| | 40 | 4.8643 | 364 | 114 | 167 | 30 | 22 | 16 | | | | | | |
| | 55 | 4.1251 | 3671 | 2412 | 758 | 350 | 69 | 32 | 11 | 17 | 11 | | | |
| | 75 | 4.0459 | 3312 | 1716 | 944 | 460 | 96 | 43 | 32 | 6 | 4 | 4 | | |
| | | | | STATION I-4 | | | | | | | | | | |
| 11 Nov. | 0 | 5.7422 | 1238 | 723 | 254 | 135 | 43 | 19 | 5 | 17 | | | | |
| 2158 | 10 | 5.4817 | 1082 | 680 | 180 | 120 | 28 | 27 | 3 | 8 | 2 | 12 | | |
| | 25 | 5.7084 | 954 | 667 | 156 | 67 | 15 | 21 | 6 | | | | | |
| | 35 | 5.9037 | 547 | 362 | 81 | 34 | 38 | | | | | | | |
| | 40 | 5.7202 | 1004 | 771 | 90 | 78 | 17 | 23 | 7 | | | | | |
| | 45 | 5.2979 | 468 | 311 | 51 | 51 | 18 | 3 | 13 | 6 | | | | |
| | 55 | | 2212 | 1295 | 537 | 211 | 81 | 46 | 12 | 9 | | | | |
| | 75 | 3.9886 | 3183 | 2034 | 615 | 343 | 97 | 45 | 19 | 4 | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION I-5 | | | | | | | | | | |
| 11 Nov. 2328 | 0 | 5.9192 | 1635 | 1007 | 313 | 173 | 39 | 35 | | | | | | |
| | 10 | 6.3898 | 987 | 644 | 169 | 84 | 23 | 25 | | | | | | |
| | 30 | 5.7838 | 348 | 181 | 78 | 44 | 3 | 23 | | | | | | |
| | 50 | 5.3388 | 793 | 459 | 170 | 100 | 24 | 9 | 7 | | | | | |
| | 55 | 4.9881 | 1659 | 932 | 397 | 195 | 70 | 23 | | | | | | |
| | 60 | 4.9915 | 2094 | 1072 | 566 | 297 | 80 | 19 | 30 | 11 | 2 | 8 | | |
| | | | | STATION I-6 | | | | | | | | | | |
| 12 Nov. 0453 | 0 | 5.9092 | 701 | 318 | 179 | 94 | 16 | 16 | 39 | | | | | |
| | 15 | 6.0033 | 758 | 504 | 130 | 57 | 5 | 19 | 5 | 5 | 8 | 6 | | |
| | 30 | 5.6359 | 846 | 643 | 77 | 54 | 20 | 13 | 7 | | | | | |
| | 45 | 5.4080 | 1694 | 681 | 602 | 211 | 122 | 14 | 23 | 8 | | | | |
| | 55 | 5.5188 | 1996 | 1287 | 330 | 257 | 49 | 14 | | | | | | |
| | | | | STATION I-7 | | | | | | | | | | |
| 12 Nov. 0601 | 0 | 5.7757 | 1442 | 913 | 275 | 116 | 44 | 3 | | | | | | |
| | 15 | 5.8484 | 1365 | 938 | 186 | 136 | 30 | 5 | | | | | | |
| | 40 | 5.5250 | 1220 | 776 | 188 | 168 | 9 | | | | | | | |
| | 50 | 5.4211 | 2231 | 1184 | 509 | 327 | 98 | 38 | | | | | | |
| | 60 | 5.5221 | 2650 | 1600 | 465 | 392 | 84 | 34 | 1 | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION I-8 | | | | | | | | | | |
| 12 Nov. 0714 | 0 | 5.8855 | 2052 | 1053 | 430 | 314 | 109 | 5 | | | | | | |
| | 10 | 5.8536 | 1918 | 1190 | 338 | 221 | 36 | 25 | | | | | | |
| | 25 | 5.7810 | 1801 | 1121 | 348 | 183 | 81 | 4 | | | | | | |
| | 35 | 5.5812 | 3151 | 2032 | 541 | 350 | 128 | 28 | | | | | | |
| | | | | STATION I-9 | | | | | | | | | | |
| 12 Nov. 0822 | 0 | 5.5168 | 1482 | 843 | 224 | 229 | 76 | 33 | | | | | | |
| | 5 | 5.6455 | 1623 | 1102 | 253 | 154 | 35 | | | | | | | |
| | 10 | 5.4379 | 2052 | 1425 | 318 | 167 | 55 | | | | | | | |
| | 25 | 5.5358 | 1940 | 1306 | 236 | 270 | 57 | 29 | | | | | | |
| | | | | STATION J-1 | | | | | | | | | | |
| 12 Nov. 0934 | 0 | 5.7702 | 3195 | 2147 | 552 | 341 | 70 | 9 | | | | | | |
| | 8 | 5.57765 | 3181 | 2052 | 633 | 336 | 77 | 33 | 3 | | | | | |
| | 15 | 5.5527 | 3417 | 1872 | 605 | 598 | 152 | | | | | | | |
| | 22 | 5.6506 | 3358 | 1818 | 683 | 496 | 206 | 48 | 33 | | | | | |
| | | | | STATION J-2 | | | | | | | | | | |
| 12 Nov. 1041 | 0 | | 798 | 507 | 91 | 110 | 20 | 4 | | | | | | |
| | 10 | | 945 | 564 | 115 | 135 | 42 | 7 | | | | | | |
| | 20 | | 1328 | 915 | 140 | 159 | 33 | | | | | | | |
| | 30 | | 2458 | 1627 | 463 | 243 | 62 | 9 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION J-3 | | | | | | | | | | |
| 12 Nov. | 0 | 5.7087 | 882 | 527 | 95 | 133 | 71 | 2 | | | | | | |
| 1222 | 15 | 5.7373 | 442 | 297 | 42 | 27 | 34 | 8 | | | | | | |
| | 30 | 5.6713 | 732 | 541 | 47 | 93 | 27 | | | | | | | |
| | | | | STATION J-4 | | | | | | | | | | |
| 12 Nov. | 0 | 5.8639 | 5898 | 3519 | 1355 | 686 | 185 | 26 | 50 | | | | | |
| 1336 | 8 | 5.9689 | 6364 | 4430 | 1030 | 652 | 59 | 94 | 6 | | | | | |
| | 15 | 6.0066 | 4304 | 2482 | 988 | 517 | 152 | 87 | | | | | | |
| | 30 | 5.6495 | 2682 | 1263 | 557 | 537 | 189 | 23 | 35 | 10 | | | | |
| | | | | STATION K-1 | | | | | | | | | | |
| 12 Nov. | 0 | 5.7585 | 1008 | 662 | 196 | 84 | 51 | | | | | | | |
| 1423 | 15 | 5.7588 | 1068 | 627 | 223 | 88 | 62 | 5 | | | | | | |
| | 25 | 5.6769 | 1076 | 779 | 152 | 86 | | | | | | | | |
| | 34 | 5.4571 | 3607 | 2507 | 657 | 286 | 86 | 11 | | | | | | |
| | | | | STATION K-2 | | | | | | | | | | |
| 12 Nov. | 0 | 5.8219 | 1904 | 1338 | 267 | 182 | 26 | 8 | | | | | | |
| 1506 | 20 | 5.7306 | 2019 | 1438 | 296 | 138 | 78 | | | | | | | |
| | 40 | 5.4078 | 2690 | 2154 | 286 | 144 | 27 | 1 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION K-3 | | | | | | | | | | |
| 12 Nov. | 0 | 5.7091 | 854 | 495 | 219 | 90 | 11 | 12 | | | | | | |
| 1546 | | 5.7305 | 668 | 369 | 155 | 87 | 16 | 8 | 13 | | | | | |
| | | 5.7021 | 970 | 110 | 307 | 363 | 69 | 45 | 17 | | | | | |
| | | | | STATION K-4 | | | | | | | | | | |
| 12 Nov. | 0 | 5.7503 | 876 | 418 | 224 | 133 | 19 | 39 | 8 | 2 | 14 | 10 | | |
| 1641 | 25 | 5.7163 | 468 | 174 | 13 | 198 | 39 | 12 | | | | | | |
| | 40 | 5.6849 | 665 | 227 | 126 | 98 | 39 | 10 | 8 | | | | | |
| | 45 | 5.2081 | 2152 | 908 | 743 | 308 | 116 | 39 | 7 | 8 | 8 | | | |
| | | | | STATION K-5 | | | | | | | | | | |
| 12 Nov. | 0 | 5.8752 | 708 | 251 | 236 | 82 | 56 | 11 | 32 | 6 | 14 | | | |
| 1736 | 15 | 5.7594 | 469 | 168 | 148 | 81 | 20 | 13 | | | | | | |
| | 35 | 5.4497 | 1283 | 837 | 264 | 96 | 31 | 13 | 24 | | | | | |
| | | | | STATION K-6 | | | | | | | | | | |
| 12 Nov. | 0 | 5.7572 | 934 | 33 | 419 | 246 | 105 | 56 | 12 | 20 | 2 | | | |
| 1919 | 20 | 5.7494 | 1032 | 435 | 295 | 169 | 44 | 17 | 23 | 13 | 5 | | | |
| | 50 | 5.3999 | 601 | 70 | 261 | 164 | 39 | 12 | 24 | 10 | | | | |
| | 60 | 4.9300 | 3390 | 1701 | 922 | 564 | 116 | 26 | 29 | 16 | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION K-6A* | | | | | | | | | | |
| 13 Nov. | 0 | 5.8314 | 4373 | 2187 | 491 | 1004 | 238 | | | | | | | |
| 2208 | 10 | 6.0388 | 4648 | 2126 | 1074 | | | | | | | | | |
| | 25 | 5.4876 | 3700 | | | | | | | | | | | |
| | 40 | 5.2064 | 4279 | | | | | | | | | | | |
| | 50 | 4.8523 | 1929 | | | | | | | | | | | |
| | | | | STATION K-7 | | | | | | | | | | |
| 13 Nov. | 0 | 5.9091 | 970 | 413 | 291 | 157 | 29 | 28 | 20 | 14 | | | | |
| 2101 | 20 | 5.7318 | 1280 | 412 | 561 | 225 | 30 | 19 | 17 | | | | | |
| | 30 | 5.1584 | 1882 | 372 | 877 | 395 | 98 | 39 | 11 | | | | | |
| | 40 | 4.9580 | 2476 | 182 | 1251 | 734 | 101 | 121 | 13 | | | | | |
| | 50 | 4.7655 | 2006 | 283 | 933 | 441 | 197 | 61 | 41 | 14 | 8 | | | |
| | | | | STATION K-8 | | | | | | | | | | |
| 12 Nov. | 0 | 5.9493 | 1432 | 143 | 525 | 418 | 143 | 41 | 29 | 24 | 11 | | | |
| 2051 | 15 | 5.8990 | 806 | 190 | 324 | 14 | 139 | 53 | 24 | 9 | 11 | | | |
| | 40 | 5.0025 | 673 | 330 | 162 | 81 | 42 | 17 | | | | | | |
| | 55 | 4.2849 | 2044 | 778 | 753 | 362 | 59 | 26 | 32 | 4 | 17 | | | |
| | 65 | 4.4447 | 1434 | 800 | 322 | 160 | 20 | 59 | 13 | 40 | | | | |

* None of these samples appeared to have any iodine solution

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION K-9 | | | | | | | | | | |
| 12 Nov. | 0 | 5.9654 | 983 | 0 | 447 | 298 | 97 | 28 | 29 | 6 | | | | |
| 2206 | 15 | 5.7151 | 723 | 227 | 217 | 140 | 66 | 43 | | | | | | |
| | 30 | 4.6923 | 509 | 197 | 137 | 78 | 22 | 18 | 18 | 6 | | | | |
| | 40 | | 1030 | 609 | 232 | 110 | 40 | 12 | | | | | | |
| | 60 | 4.1704 | 1969 | 1168 | 455 | 241 | 39 | 41 | 2 | 13 | | | | |
| | | | | STATION K-10 | | | | | | | | | | |
| 12 Nov. | 0 | 5.9810 | 839 | 0 | 305 | 275 | 65 | 50 | 20 | 35 | 19 | | | |
| 2328 | 20 | 5.7935 | 434 | 86 | 102 | 134 | 28 | 43 | | | | | | |
| | 40 | 4.3258 | 480 | 194 | 146 | 87 | 15 | 17 | | | | | | |
| | 50 | 3.6722 | 1640 | 853 | 436 | 232 | 57 | 37 | 3 | | | | | |
| | 85 | 3.5258 | 2345 | 1414 | 514 | 225 | 103 | 54 | 10 | 5 | | | | |
| | | | | STATION K-11 | | | | | | | | | | |
| 13 Nov. | 0 | 5.9264 | 1070 | 470 | 324 | 144 | 29 | 32 | 8 | | | | | |
| 0139 | 20 | 5.9065 | 430 | 126 | 113 | 80 | 60 | 7 | 3 | | | | | |
| | 40 | 5.6511 | 367 | 213 | 56 | 51 | 13 | 10 | 9 | | | | | |
| | 65 | 4.9955 | 393 | 251 | 93 | 19 | 6 | | | | | | | |
| | 85 | 3.9190 | 170 | 89 | 34 | 24 | 16 | | | | | | | |
| | 100 | 3.9735 | 333 | 217 | 76 | 9 | 7 | | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION L-1 | | | | | | | | | | |
| 13 Nov. 0316 | 0 | 5.9963 | 640 | 85 | 218 | 146 | 50 | 51 | 7 | 21 | 11 | | | |
| | 20 | 4.6692 | 474 | 195 | 110 | 82 | 35 | 17 | 14 | | | | | |
| | 40 | 5.5918 | 334 | 132 | 74 | 75 | 27 | 5 | | | | | | |
| | 70 | 3.4484 | 330 | 164 | 81 | 44 | 13 | 1 | | | | | | |
| | 100 | 4.1597 | 614 | 361 | 83 | 96 | 23 | 7 | | | | | | |
| | | | | STATION L-2 | | | | | | | | | | |
| 13 Nov. 0518 | 0 | 5.6537 | 668 | 341 | 159 | 106 | 42 | 2 | | | | | | |
| | 20 | 5.7330 | 697 | 458 | 90 | 89 | 21 | | | | | | | |
| | 35 | 4.5987 | 404 | 205 | 104 | 38 | 28 | 14 | 7 | | | | | |
| | 50 | 3.9404 | 980 | 600 | 204 | 119 | 33 | | | | | | | |
| | 80 | 3.6587 | 2305 | 1086 | 763 | 278 | 88 | 46 | | | | | | |
| | 100 | | 846 | 479 | 198 | 94 | 19 | 24 | 5 | | | | | |
| | | | | STATION L-3 | | | | | | | | | | |
| 13 Nov. 0712 | 0 | 5.8992 | 724 | 141 | 281 | 125 | 39 | 19 | 31 | 22 | 23 | | | |
| | 20 | 4.1920 | 785 | 484 | 113 | 96 | 40 | 12 | 9 | | | | | |
| | 35 | 3.8200 | 900 | 444 | 255 | 114 | 37 | 8 | 11 | | | | | |
| | 60 | 3.7890 | 1088 | 697 | 209 | 93 | 34 | 8 | 13 | 15 | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION L-4 | | | | | | | | | | |
| 13 Nov. | 0 | 5.8400 | 933 | 51 | 309 | 252 | 117 | 84 | 35 | | | | | |
| 0849 | 15 | 5.8525 | 934 | 498 | 199 | 108 | 37 | 30 | 14 | 10 | | | | |
| | 30 | 6.0081 | 336 | 159 | 87 | 53 | 13 | | | | | | | |
| | 45 | 5.1028 | 1388 | 540 | 494 | 211 | 71 | 16 | 18 | 5 | | | | |
| | | | | STATION M-1 | | | | | | | | | | |
| 13 Nov. | 0 | 6.3528 | 1182 | 240 | 380 | 286 | 81 | 98 | 7 | | | | | |
| 1006 | 10 | 6.3951 | 1530 | 639 | 336 | 269 | 50 | 68 | 13 | | | | | |
| | 20 | 6.0460 | 1024 | 424 | 306 | 159 | 61 | 10 | 23 | 15 | | | | |
| | 28 | 5.6755 | 750 | 424 | 161 | 94 | 36 | 8 | | | | | | |
| | 35 | 5.3593 | 1134 | 630 | 268 | 143 | 38 | 21 | | | | | | |
| | | | | STATION M-2 | | | | | | | | | | |
| 13 Nov. | 0 | 6.0616 | 1297 | 402 | 383 | 270 | 73 | 40 | 40 | | | | | |
| 1157 | 10 | 6.0128 | 1136 | 308 | 418 | 218 | 37 | 52 | 14 | | | | | |
| | 15 | 5.6363 | 726 | 374 | 191 | 92 | 30 | 6 | | | | | | |
| | 25 | 5.4082 | 1106 | 524 | 337 | 159 | 41 | 18 | | | | | | |
| | 35 | 5.2560 | 1832 | 811 | 580 | 294 | 70 | 27 | 10 | | | | | |
| | 38 | 5.2421 | 1800 | 694 | 554 | 359 | 107 | 24 | 18 | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION M-3 | | | | | | | | | | |
| 13 Nov. 1437 | 0 | 6.0139 | 1010 | 351 | 257 | 168 | 83 | 51 | | | | | | |
| | 5 | 5.9696 | 956 | 336 | 305 | 165 | 37 | | | | | | | |
| | 15 | 5.9298 | 698 | 135 | 244 | 134 | 55 | 22 | 22 | 10 | | | | |
| | 25 | 5.6263 | 822 | 238 | 217 | 199 | 63 | | | | | | | |
| | | | | STATION M-4 | | | | | | | | | | |
| 13 Nov. 1539 | 0 | 5.9312 | 921 | 411 | 296 | 108 | 23 | 21 | 13 | 21 | | | | |
| | 10 | 5.9201 | 699 | 267 | 240 | 77 | 61 | 9 | 9 | | | | | |
| | 15 | 5.5297 | 1854 | 794 | 579 | 306 | 81 | 38 | 13 | 14 | | | | |
| | 25 | 5.3570 | 2295 | 1145 | 686 | 302 | 88 | 24 | 11 | | | | | |
| | | | | STATION M-5 | | | | | | | | | | |
| 13 Nov. 1654 | 0 | 6.1033 | 700 | 38 | 307 | 197 | 43 | 49 | 28 | | | | | |
| | 4 | 6.0159 | 1336 | 286 | 469 | 275 | 153 | 67 | 19 | 22 | | | | |
| | 10 | 5.7209 | 916 | 327 | 146 | 76 | 36 | 7 | 9 | 13 | | | | |
| | 20 | 5.6830 | 586 | 180 | 202 | 87 | 46 | 24 | 2 | | | | | |
| | 30 | 5.0842 | 1621 | 519 | 564 | 362 | 83 | 49 | 13 | 6 | | | | |
| | | | | STATION M-6 | | | | | | | | | | |
| 13 Nov. 1810 | 0 | 5.9541 | 1130 | 200 | 510 | 232 | 94 | 44 | | | | | | |
| | 8 | 5.9185 | 943 | 87 | 231 | 126 | 22 | 24 | 19 | 5 | | | | |
| | 15 | 5.9353 | 420 | 110 | 151 | 71 | 19 | 9 | 8 | 24 | | | | |
| | 28 | 5.3799 | 1062 | 528 | 224 | 206 | 43 | 32 | | | | | | |

TABLE 2 (Cont.)

| Date Time | Sample Depth | Oxygen (ML/L) | Total Count at Threshold Zero | Relative Pulse Height 0-5 | 5-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | STATION M-7 | | | | | | | | | | |
| 13 Nov. 1916 | 0 | 5.9988 | 599 | 18 | 275 | 173 | 61 | 3 | | | | | | |
| | 15 | 5.8522 | 311 | 45 | 94 | 89 | 11 | 13 | 15 | 10 | | | | |
| | 20 | 5.7203 | 494 | 156 | 112 | 135 | 22 | 10 | | | | | | |

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13. ABSTRACT

Eighty-six oceanographic stations were occupied in the waters between Monterey Bay and San Francisco Bay during the period 7-14 November 1969. Values of beam transmittance, oxygen content, particulate count, and temperatures were obtained from the surface to 100 meters. These parameters were analyzed and compared by means of depth profiles, horizontal contours and vertical contours.

The average sea surface temperature during this period was 14.44° C. The northern part of Monterey Bay had the lowest values of beam transmittance and highest values of particulate count. The California Current appears to be flowing southward down the coast at depths above 60 meters and entering Monterey Bay where it sinks to a depth of at least 61 meters. Indications of downwelling are present off the coast between Pt. Ano Nuevo and Santa Cruz and this is attributed to the northward flowing Davidson Current impinging on the shore and sinking. A layer of maximum particulate count was often found to exist within the thermocline. A fairly good correlation seems to exist between beam transmittance and particulate count. No simple relationship between beam transmittance and oxygen content was apparent. Approximately 74 percent of all particulates observed by means of a Coulter Counter having a 100 micron orifice were less than 6.2 microns in diameter.

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| Beam Transmittance | | | | | | |
| Particulate Matter | | | | | | |
| Temperature | | | | | | |
| Oxygen | | | | | | |
| Monterey Bay, California | | | | | | |
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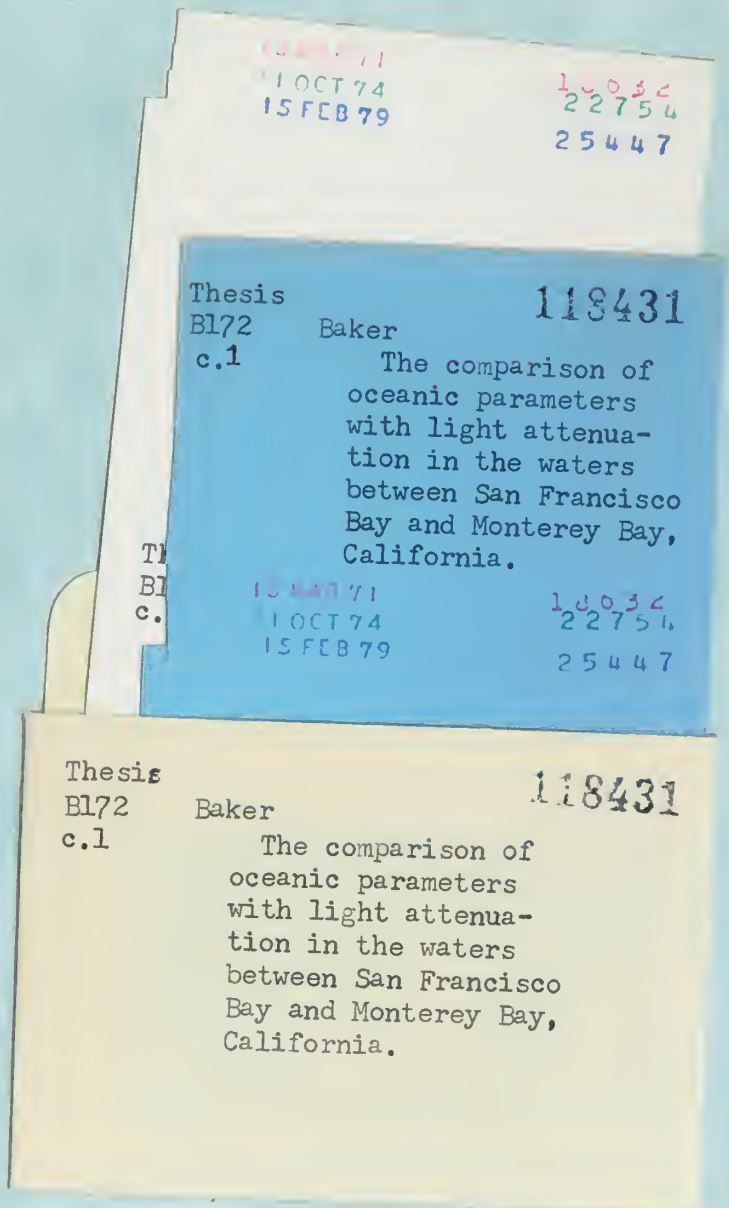


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